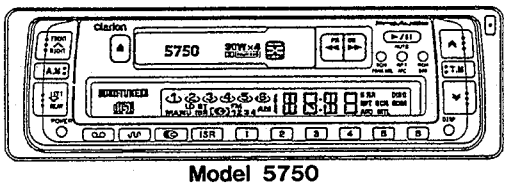
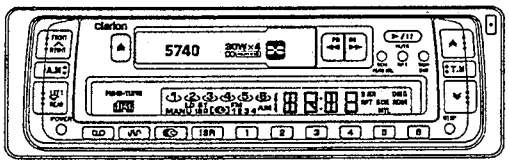
**Clarion Co., Ltd.** Export Division—22-3, Shibuya 2-chome, Shibuya-ku, Tokyo, 150 Japan Tel: 03-3400-1121 Fax: 03-3400-8679 Telex: J22908, J22152
Service Dept.—50 Kamitoda, Toda-shi, Saitama, 335 Japan Tel: 048-443-1111 Telex: J2962628 CLAFAC-J

# clarion Service Manual

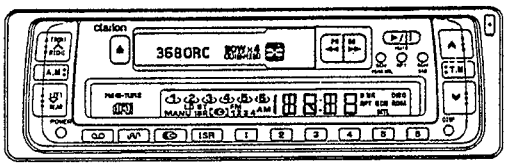
Published by Service Information Section



Model 5750



Model 5740



Model 3680RC

## AM/FM STEREO CASSETTE WITH CD CHANGER CONTROLLER

**Model 5750**
**(PE-9803A)**

**Model 5740**
**(PE-9804A)**

**Model 3680RC**
**(PE-9804B)**

| | 5750 | 5740/3680RC |
|---|---|---|
| RCA Line Output | 4-CH | 2-CH |
| Illumination | Amber/Green | Green |
| APC | ○ | × |

## ■SPECIFICATIONS:

**General**
Power Supply Voltage:
14.4 V (10.8 to 15.6 allowable), negative ground
Current Consumption: Less than 10 A
Speaker Impedance: 4 Ω (4 Ω to 8 Ω allowable)

**FM Tuner**
Frequency Range: 87.9 MHz to 107.9 MHz
Usable Sensitivity: 9 dBf (5750)
12 dBf (5740/3680RC)
50 dB Quieting Sensitivity: 15 dBf (5750)
17 dBf (5740/3680RC)
Alternate Channel Selectivity: 75 dB (5750)
70 dB (5740/3680RC)
Stereo Separation (@1 kHz, 60 dBf): 35 dB
Frequency Response (±3 dB): 30 Hz to 15 kHz

**AM Tuner**
Frequency Range: 530 kHz to 1,710 kHz
Usable Sensitivity: 20 μV (5750)
25 μV (5740/3680RC)

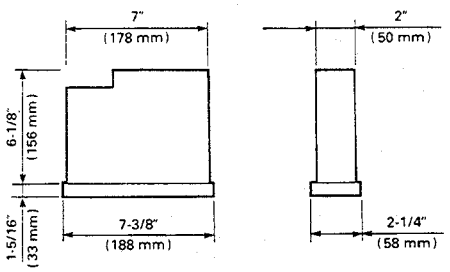
**Cassette Deck**
Wow & Flutter (WRMS): 0.1%
Stereo Separation (1 kHz): 45 dB
Signal-to-Noise Ratio
70 μs ($CrO_2$, FeCr, Metal)/Dolby B NR: 58 dB/67 dB (5750)
56 dB/66 dB (5740/3680RC)
Frequency Response (±3 dB)
120 μs (Normal): 30 Hz to 16 kHz
70 μs ($CrO_2$, FeCr, Metal): 30 Hz to 18 kHz

**Power Amplifier**
Maximum Power Output: 120 W (30 W×4)
Continuous Average Power Output:
14 W×4, innto 4 Ω, 20 Hz to 20 kHz, @1% THD

**Pre-Amplifier**
Bass Control (@30 Hz): ±15 dB (5750)
(@100 Hz): ±10 dB (5740/3680RC)
Treble Control (@10 kHz): ±10 dB
Line Output (@1 kHz, 10 kΩ): 1000 mV

Weight: 1.8 kg (63.5 oz)

Dimensions:




**Notes:**
- Specifications comply with EIA standards
- Due to improvements, specifications and design are subject to change without notice.

- Dolby Noise Reduction System manufactured under license from Dolby Laboratories Licensing Corporation.
- Dolby and the double-D symbol are trademarks of Dolby Laboratories Licensing Corporation.

# ■COMPONENTS:

◎PE-9803A-A/PE-9804A-A/PE-9804B-A

| | | |
|---|---|---|
| Main unit | | 1 |
| Mounting bracket | 300-9035-01 | 1 |
| Extension lead | 854-3232-00 | 1 |
| Parts bag | 921-9111-00 | 1 |
| ( Hook plate (R) | 331-0118-00 | 1 |
| Hook plate (L) | 331-0119-00 | 1 |
| Lead holder | 335-0833-01 | 2 |
| ( Screw | 716-0496-01 | 1 |
| Parts bag | 921-9112-00 | 1 |
| ( DCP case | 335-4467-00 | 1 |

# ■FEATURES:

### Audio
- Electronic Audio Controls
- Loudness Contour
- Audio Muting
- 4-Channel Gold-Plated RCA Line Level Output (5740/3680RC 2-Channel)
- Max. Power Output 30 W×4

### General
- Instant Selection Recall (ISR)
- Multi-Mode LCD "Full Information Display"
- Illumination with Dual Color Selector (5750)
- Triggered Audio Mute for Cellular Telephone
- Amp Turn-On Trigger
- Radio/Tape/CD Mode Selector
- Digital Control Lead
- Digital Quartz Clock

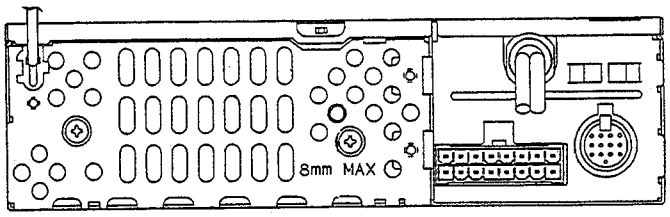
### Chassis
- DIN Chassis with Detachable Control Panel
- ISO Mounting Capability

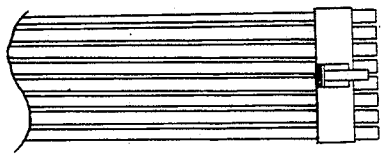
### Tape
- Auto Reverse with Dual Azimuth Adjustment
- Electronic DC Servo Motor
- Locking FF/REW
- Key-Off Pinchroller Release
- Dolby® B Noise Reduction
- Automatic Program Control (APC) (5750)
- Tape Equalization Selector (MTL)
- Hard Permalloy Dual Gutter Head
- Tape Head Needs Cleaning Indicator
- Illuminated Tape Door

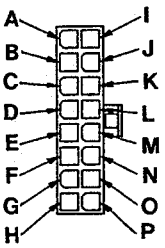
### CD Changer Control
- Direct Disc Select
- Multi-CD Changer Control Capability (up to 4 CD Changers)
- Play/Pause Button
- Random Play (Track/Disc/Changers)
- Intro Music Scan (Track/Disc)
- Music Selection Repeat (Track/Disc)
- Track Music Search FF/FB
- Audible FF/FB

### Tuner
- Electronic Quartz-Locked PLL Tuning
- 18 FM/6 AM Touchbutton Memory
- Seek Up/Down Tuning
- Preset Station Scan (PS)
- Automatic Station Store (AS)
- Magi-Tune™ FM Reception System
  - Auto DX/Lo (keyed AGC)
  - Dual Gate FET/Balanced Mixer FM Front-End
  - Signal Actuated Stereo Control (SASC)
  - FM Noise Canceller (Clean Z1)
  - Optimum IF Filter
  - Soft Muting
- Switchable Frequency Spacing

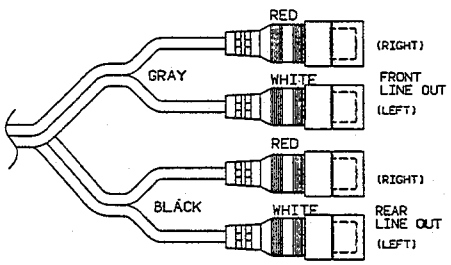
# ■REAR VIEW • CONNECTION:



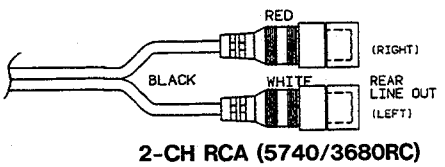





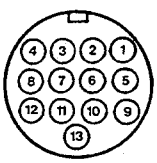

| | | |
|---|---|---|
| A | Phone mute | BRN |
| B | | |
| C | Back up | YEL |
| D | Ground | BLK |
| E | Rear left SP ⊕ | GRN |
| F | Rear left SP ⊖ | GRN/BLK |
| G | Front left SP ⊕ | WHT |
| H | Front left SP ⊖ | WHT/BLK |
| I | | |
| J | D/A Control | PNK/WHT |
| K | Accessory | RED |
| L | Auto antenna | BLU/WHT |
| M | Rear right SP ⊕ | PUR |
| N | Rear right SP ⊖ | PUR/BLK |
| O | Front right SP ⊕ | GRY |
| P | Front right SP ⊖ | GRY/BLK |




4-CH RCA (5750)




2-CH RCA (5740/3680RC)

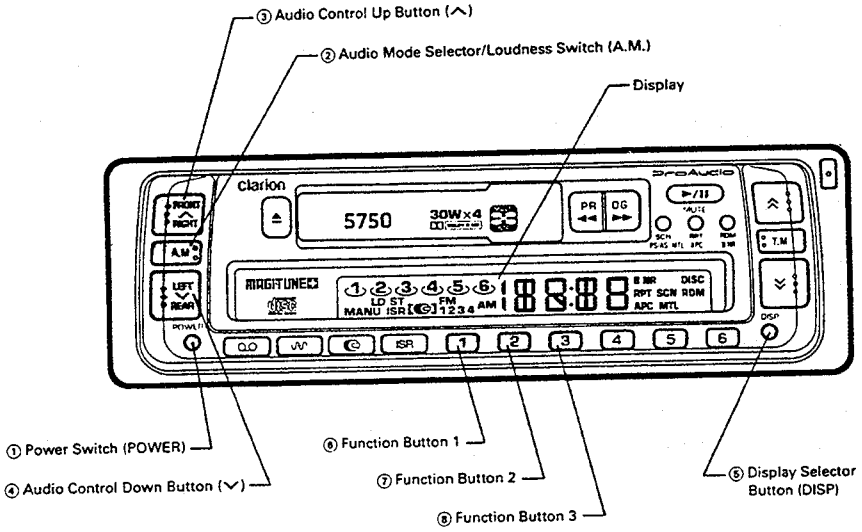



13P DIN

| | |
|---|---|
| 1 | Serial data IN/OUT |
| 2 | Serial clock |
| 3 | |
| 4 | Service request |
| 5 | |
| 6 | Signal ground |
| 7 | Left channel IN |
| 8 | Right channel IN |
| 9 | |
| 10 | Back up |
| 11 | Accessory control |
| 12 | Ground |
| 13 | |

# ■OPERATION:

## ■ Audio and General Controls

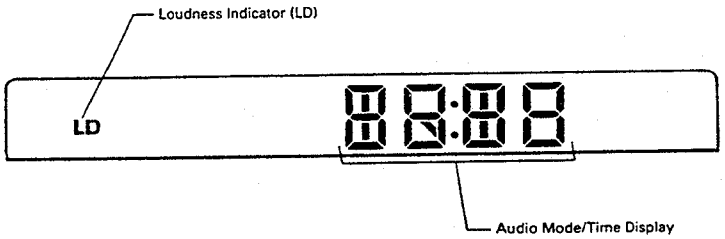

③ Audio Control Up Button (^)
② Audio Mode Selector/Loudness Switch (A.M.)
Display
① Power Switch (POWER)
④ Audio Control Down Button (v)
⑥ Function Button 1
⑦ Function Button 2
⑧ Function Button 3
⑤ Display Selector Button (DISP)

* **Audio Mode Selector/Loudness Switch (A.M.)** ☛ ②

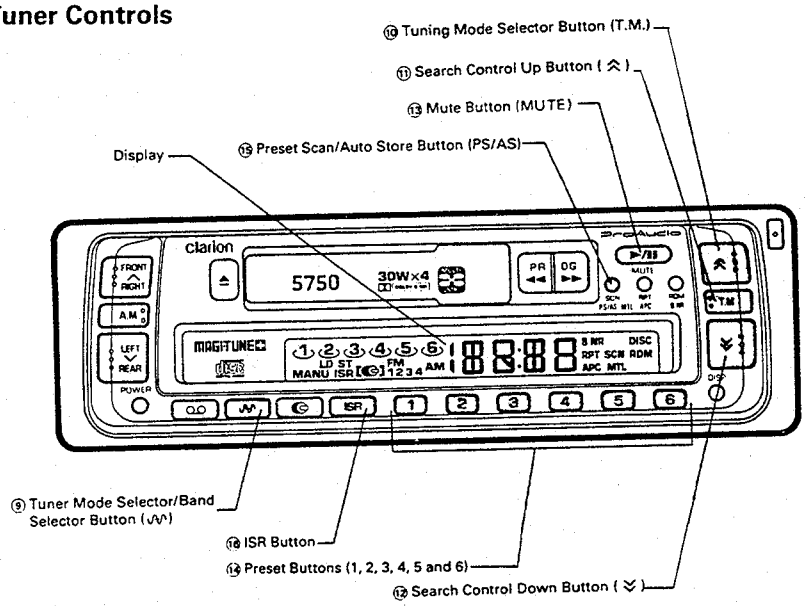
- **Normally the audio mode is set to the volume adjustment mode.**
  When button ② is pressed, the mode switches in the following order:
  Volume adjustment → Bass adjustment → Treble adjustment → Left/right balance adjustment → Front/rear balance adjustment → Volume adjustment
- **Turning the loudness mode on and off**
  When button ② is held in for over 2 seconds, the loudness mode turns on and **"LD"** appears on the display. The loudness mode emphasizes the low and high frequencies when the volume is low to create a more powerful sound. Press the button again for over 2 seconds to turn loudness off.

☆ **Switching the Illumination Color (5750)**
Press button ⑥ while holding in button ⑤ to switch the illumination color between amber and green.
**Note:** If the display is set to the time mode, the time setting mode is set if button ⑤ is held in for more than 2 seconds.

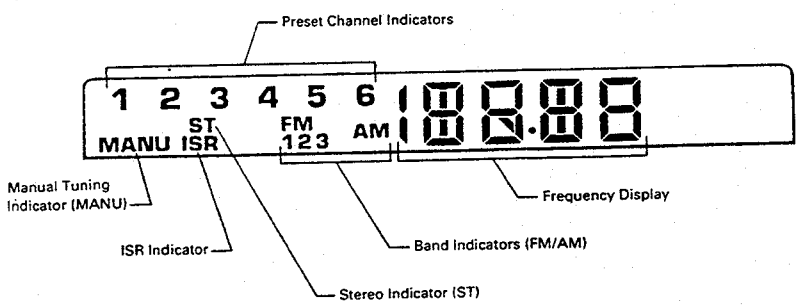
## ■ Display




## ■ Tuner Controls


⑩ Tuning Mode Selector Button (T.M.)
⑪ Search Control Up Button ( ^ )
⑬ Mute Button (MUTE)
Display
⑮ Preset Scan/Auto Store Button (PS/AS)
⑨ Tuner Mode Selector/Band Selector Button (^)
⑯ ISR Button
⑭ Preset Buttons (1, 2, 3, 4, 5 and 6)
⑫ Search Control Down Button ( v )

## ■ Display




## ■ Switchable Frequency Setting

This car stereo is initially set to tune in frequency intervals of 10 kHz for AM and 200 kHz for FM, the standard calibrations in the U.S. When using the unit outside the U.S., use the following procedure to switch the frequency steps and frequency range:

1) Turn the power on and set the tuner mode.
2) Keep button ⑤ pressed and while pressing the button, press button ⑫ for at least 2 seconds.
3) Release the buttons.

This procedure changes the factory setting to 9 kHz steps for AM and 50 kHz steps for FM, the standard calibrations for countries other than the U.S.

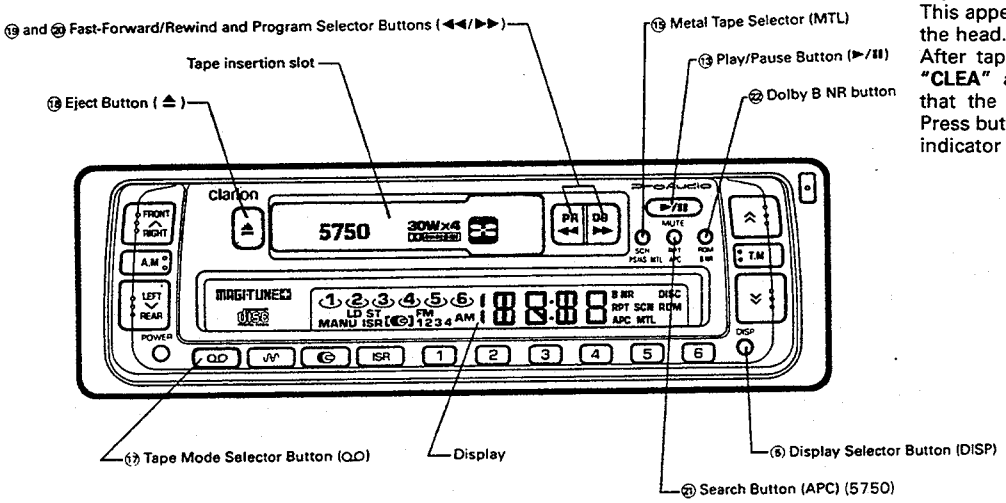
To change the AM/FM setting back to the U.S. standard frequencies:

1) Set the tuner mode.
2) While pressing button ⑨, press button ⑪ for at least 2 seconds.
3) Release the buttons.

The cart below lists the frequency specifications for the U.S. and other countries.

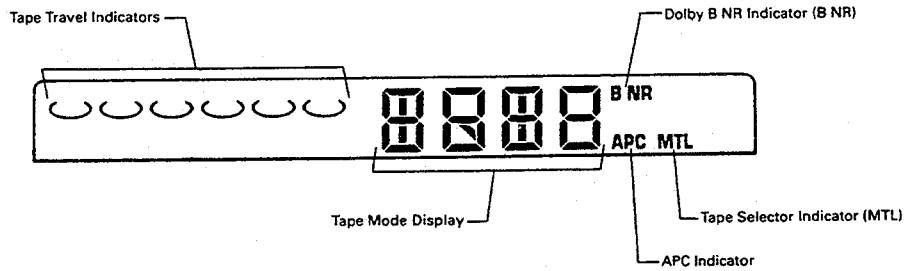
| | | Initial Setting (U.S. standard) | New Setting (outside U.S.) |
|---|---|---|---|
| AM | Frequency spacing | 10 kHz | 9 kHz |
| | Frequency range | 530 to 1710 kHz | 531 to 1629 kHz |
| FM | Frequency spacing | 200 kHz | 50 kHz |
| | Frequency range | 87.9 to 107.9 MHz | 87.5 to 108 MHz |

## ■ Cassette Tape Controls

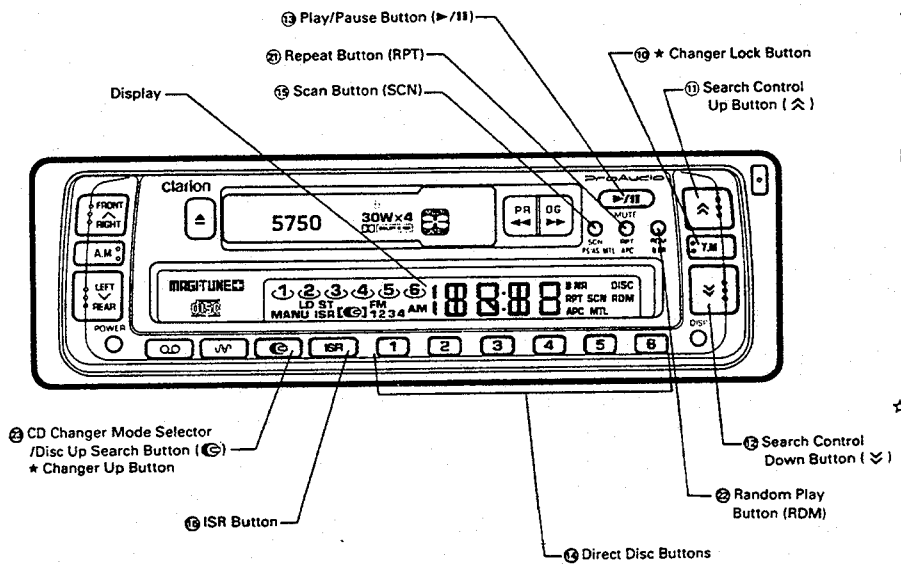

⑲ and ⑳ Fast-Forward/Rewind and Program Selector Buttons (◀◀/▶▶)
Tape insertion slot
⑱ Eject Button (⏏)
⑮ Metal Tape Selector (MTL)
⑬ Play/Pause Button (▶/II)
⑫ Dolby B NR button
⑰ Tape Mode Selector Button (QO)
Display
⑥ Display Selector Button (DISP)
㉑ Search Button (APC) (5750)

☆ **Tape Cleaning Indicator**
This appears to indicate that it is time to clean the head.
After tapes have been played for 30 hours, **"CLEA"** appears on the display to indicate that the playback head should be cleaned. Press button ⑤ and then button ⑰ to turn this indicator off.

## ■ Display

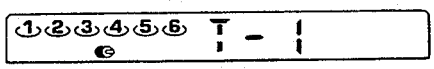



## ■ CD Changer and Multi-Controller Controls


⑬ Play/Pause Button (▶/II)
㉑ Repeat Button (RPT)
⑭ ★ Changer Lock Button
Display
⑲ Scan Button (SCN)
⑪ Search Control Up Button (⩓)
㉓ CD Changer Mode Selector /Disc Up Search Button (⏲)
★ Changer Up Button
⑯ ISR Button
⑫ Random Play Button (RDM)
⑬ Search Control Down Button (⩔)
⑭ Direct Disc Buttons

✱ **CD Changer Mode Selector Button (⏲)** ☛ ㉓
Use this button to switch to the CD changer mode from any other program source. When pressed, the " ⏲ " indicator, the disc number and the track number appear on the display and playback begins.

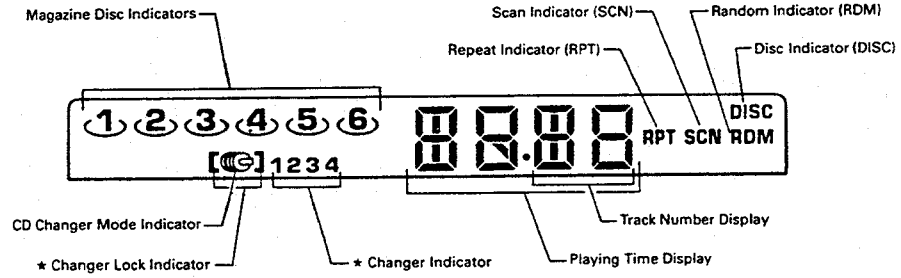
■ **Example of Display**



**Note 1:** **"DISC"** flashes on the display if no magazine is loaded in the CD changer.
**Note 2:** The " ⏲ " indicator and **"Conn"** flash on the display if the CD changer is not connected properly.

☆ **Last Position Memory**
The track which was playing when the power was turned off or before the mode was switched is stored in the memory. When the CD changer mode is next set, playback begins from the track which was previously playing.
**Note:** The memory for the track which was previously playing is cleared when the magazine is removed.

## ■ Display



* **Play/Pause Button ( ►/II)** ☛ ⑬
Press this button to switch between the play and pause modes.

* **Disc Up Search Button (⌔)** ☛ ㉓
Press this button to start playing the next disc. The disc changes in order each time this button is pressed. If fewer than six discs are loaded in the magazine, the corresponding disc numbers are skipped.

* **Direct Disc Buttons** ☛ ⑭
Use these buttons (1 to 6) to play the disc with the corresponding number. Nothing happens if a button at which no disc is loaded is pressed. If the number of the disc currently playing is pressed, playback returns to the first track on the disc. (*Top function)

* **Search Control Up Button ( ⌃ )** ☛ ⑪
**Search Control Down Button ( ⌄ )** ☛ ⑫
Use these buttons to search for track numbers or to forward and reverse the disc.
  - **Searching for Track Numbers**
    Press button ⑪ to select a higher track number, and button ⑫ to select a lower one. The track numbers are indicated on the display.
  - **Forwarding and Reversing**
    Press and hold in button ⑪ to move forward, or press and hold in button ⑫ to move backward. The disc is played at 15 times the normal speed after the button has been held in for 5 seconds. The sound can be heard during forwarding and reversing.

* **Repeat Button (RPT)** ☛ ㉑
There are two repeat modes: track repeat for playing a single track repeatedly, and disc repeat for repeating an entire disc.
  - **Track Repeat**
    Press button ㉑. The **"RPT"** indicator appears on the display and the track currently playing is played repeatedly. Press the button again to cancel the repeat mode.
  - **Disc Repeat**
    Press button ㉑ for more than 2 seconds. **"DISC"** and the **"RPT"** indicator appear on the display, and the disc currently playing is play repeatedly. Press the button again to cancel the repeat mode.

* **Scan Button (SCN)** ☛ ⑮
With this function, the first 10 seconds of each track can be played to make it easy to find the desired track. There are two scanning modes: track scan for playing the beginning of each track on a disc, and disc scan for playing the beginning of the first track on each disc.
  - **Track Scan**
    Press button ⑮. The **"SCN"** indicator appears on the display and track scanning starts. When pressed again, scanning is cancelled and playback continues from that point. After the last track on the disc is scanned, track scanning continues from the next disc.
  - **Disc Scan**
    Press button ⑮ for more than 2 seconds. **"DISC"** and the **"SCN"** indicator appear on the display and disc scanning starts. Press the button again to cancel the scan mode.

* **Random Play Button (RDM)** ☛ ㉒
There are two random play modes: random play of all selections on one disc at a time, and random play of all tracks on all discs in the magazine.
  - **Random Play of One CD**
    Press button ㉒. The **"RDM"** indicator appears on the display and random play begins. Press the button again to cancel the random play mode. Once all the tracks on that disc have been played, the tracks on the next disc are played in random order.
  - **Random Play of All CDs**
    Press button ㉒ for more than 2 seconds. **"DISC"** and the **"RDM"** indicator appear on the display and disc random play begins. Press the button again to cancel the disc random play mode. The tracks are selected at random from all discs in the magazine, so the same track may be played more than once.

* **ISR (Instant Selection Recall) Button** ☛ ⑯
Use this button to recall a certain CD selection (track) at any time, no matter what the mode. Press button ⑯ while holding in button ㉓. Once that track has played, playback continues on to the next track.

☆ **Setting the ISR Track**
1. Play the track you want to set for the ISR function.
2. Press button ⑯ for at least 2 seconds.
3. After 2 seconds, the disc and track numbers begin to flash, indicating that the memory is set.

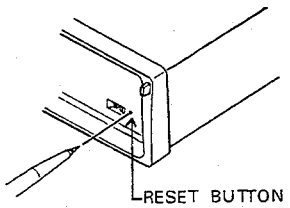
**Note:** These disc and track numbers remain stored in the memory even if the magazine is changed. If the magazine is changed and there is no disc or track at the corresponding position, the first track on the previous or following disc is played.

## ■ ERROR DISPLAY

■ **For system protection, this unit is equipped with various self-diagnosis functions. If a problem arises, the user is warned of the problem by error displays. Take the measures explained below to deal with the problem.**

| Error Display | Measures |
|---|---|
| ①②③④⑤⑥ ⌔ HHHH | This is displayed in the CD changer mode if the temperature in the CD changer has increased and playback has automatically been stopped.<br>→Lower the temperature around the CD changer and wait awhile. |
| ①②③④⑤⑥ ⌔ ER 1 | This is displayed in the CD changer mode if the battery inside the CD changer has run down.<br>→Consult your store of purchase. |
| ①②③④⑤⑥ ⌔ ER 2 | This is displayed in the CD changer mode if a problem has arisen with the CD changer mechanism (discs cannot be changed, etc.)<br>→The CD changer mechanism may be damaged, so consult your store of purchase. |
| ①②③④⑤⑥ ⌔ ER 3 | This is displayed during palyback in the CD changer mode if the pickup cannot focus due to scratches on the disc, etc.<br>→Check the disc in the magazine. |

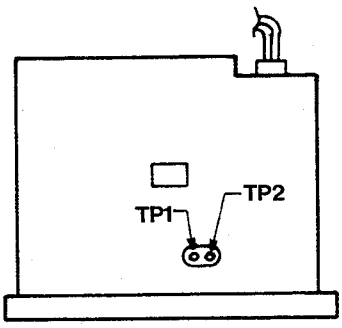
※ If nothing happens when buttons are pressed, or display is wrong, press the reset button for approximetely 2 seconds.



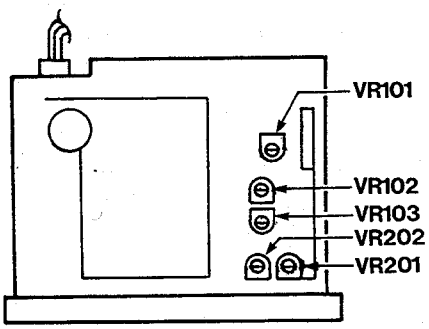
# ■ADJUSTMENT:

| Adjustment item | Adjustment point | Procedure |
|---|---|---|
| Dolby NR | VR201 (R)<br>VR202 (L) | 1. Insert a Dolby level test tape (400Hz-200nWb/m), connect the millivolt meter to TP1 (R) and TP2 (L), and adjust VR201 (R) and VR202 (L) to obtain an output of 300mV ±1dB. |
| FM auto stop Sensitivity | VR103 | 1. Input the 98.1MHz/25dB, 400Hz modulation frequency, 30% modulation degree SG signal.<br>2. Adjust VR103 so that seek up tuning stops at 25dB. |
| FM noise convergence | VR102 | 1. Input the 98.1MHz/55dB.<br>2. Make the output level to 0dB. (0.775V)<br>3. Set the input level to minimum, and adjust VR102 so that the output level is −15dB. |
| AM auto stop Sensitivity | VR101 | 1. Input the 1000kHz/35dB, 400Hz modulation frequency, 30% modulation degree SG signal.<br>2. Adjust VR101 so that seek up tuning stops at 35dB. |

● **Adjustment point**




Bottom View



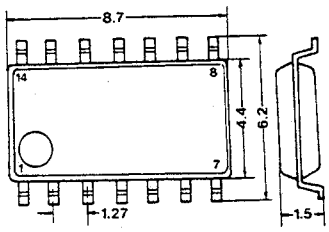

Top View

# ■EXPLANATION OF IC's:

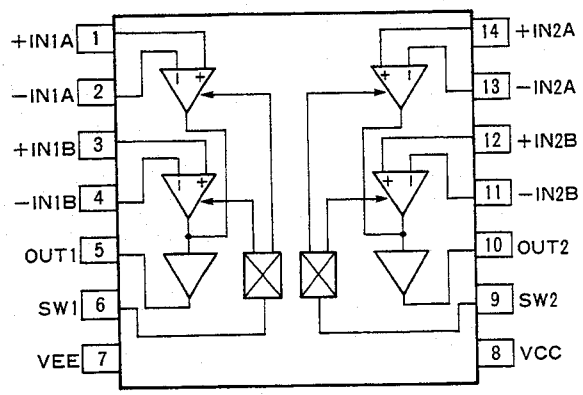
**※IC's other than explained below are described in Service Manual 「EXPLANATION OF IC's」 Vol.2~Vol.4.**

## ■BA3129F 051-1811-00 For Audio With SW Dual OP Amp

**Outward Form**

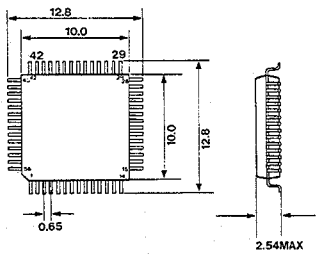



**Block Diagram**

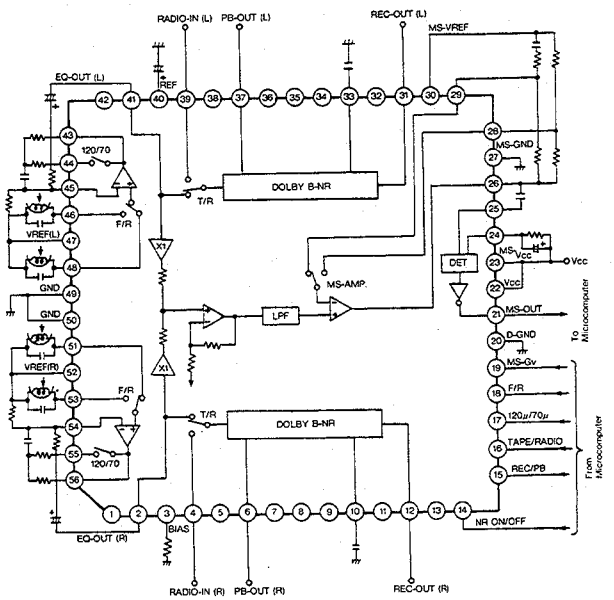



## ■HA12163 051-1777-00 Dolby B Type NR System

**Outward Form**




**Block Diagram**

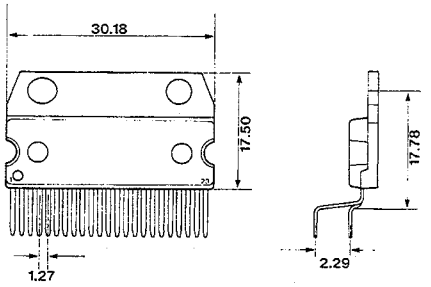


**Terminal Description**

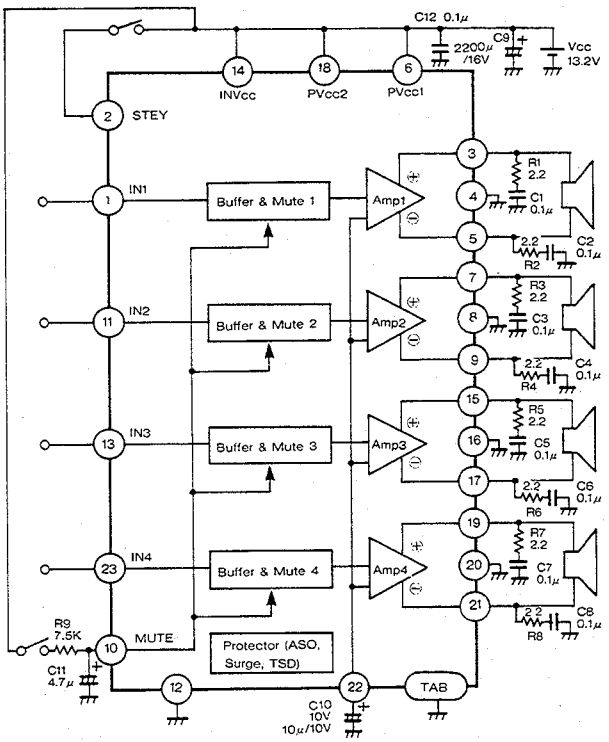
| Pin No. | Symbol | Function |
|---|---|---|
| 1 | NC | Not in use. |
| 2 | TAI | Tape input. |
| 3 | BIAS | Reference current input. |
| 4 | RAI | Radio input. |
| 5 | NC | Not in use. |
| 6 | PB OUT | Playback (Decode) output. |
| 7 ~ 9 | NC | Not in use. |
| 10 | NR DET | Time constant pin for rectifier. |
| 11 | NC | Not in use. |
| 12 | REC OUT | Recording (Encode) output. |
| 13 | NC | Not in use. |
| 14 | ON/OFF | Mode control input. |
| 15 | REC/PB | |
| 16 | TAPE/RADIO | |
| 17 | 120μ/70μ | |
| 18 | F/R | |
| 19 | MS DET | |
| 20 | D GND | Digital (Logic) ground. |
| 21 | MS OUT | Music sensor output to MPU. |
| 22 | Vcc | Power supply. |
| 23 | MS Vcc | |
| 24 | MS DET | Time constant pin for rectifier. |
| 25 | MSI | Music sensor rectifier input. |
| 26 | MA DET | Music sensor amp output. |
| 27 | MS GND | Music sensor ground. |
| 28 | NOI | Negative feedback input for Normal speed. |
| 29 | FFI | Negative feedback input for FF or REW. |
| 30 | MS VREF | Reference voltage buffer output. |
| 31 | REC OUT | Recording (Encode) output. |
| 32 ~ 36 | NC | Not in use. |
| 37 | PB OUT | Play back (Decode) output. |
| 38 | NC | Not in use. |
| 39 | RAI | Recode input. |
| 40 | RIP | Ripple filter. |
| 41 | TAI | Tape input |
| 42 | NC | Not in use. |
| 43 | EQ OUT | Equalyzer output. |
| 44 | EQ OUT-M | Equalyzer output (Metal). |
| 45 | NFI | Negative feedback terminal of PB-EQ amp. |
| 46 | RIN | PB-EQ input for Reverse. |
| 47 | VREF | Reference voltage buffer output. |
| 48 | FIN | PB-EQ input for Forward. |
| 49 50 | GND | Ground. |
| 51 | FIN | PB-EQ input for Forward. |
| 52 | VREF | Reference voltage buffer output. |
| 53 | RIN | PB-EQ input for Reverce. |
| 54 | NFI | Negative feedback terminal of PB-EQ amp. |
| 55 | EQ OUT-M | Equalyzer output (Metal). |
| 56 | EQ OUT | Equalyzer output. |

## ■HA13150 051-1810-00 19W×4ch BTL Power Amp

**Outward Form**

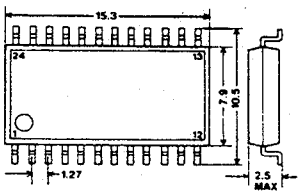



**Block Diagram**

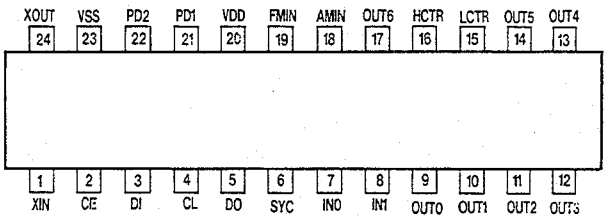



## ■LC7219M 051-1717-05 PLL Frequency Synthesizer

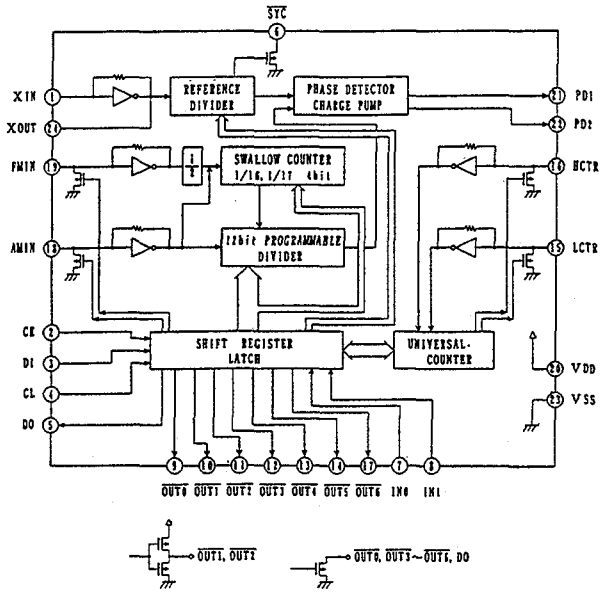
**Outward Form**




**Terminal Connection**



### Block Diagram



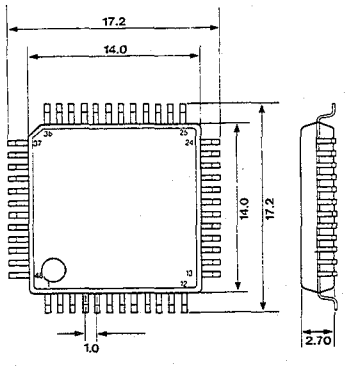

| Symbol | Function |
|---|---|
| XIN, XOUT | X'tal OSC (7.2MHz) |
| FMIN, AMIN | Local oscillation data input |
| CE, CL, DI, DO | Serial data I/O port |
| $\overline{OUT0}$~$\overline{OUT6}$ | Output terminal |
| IN0, IN1 | Input terminal |
| HCTR, LCTR | Counter input |
| PD1, PD2 | Charge pump output |
| SYC | For controler clock (400kHz) |

## ■LC7537NE-HT 051-0866-16 Electronic Volume

### Outline

This IC is an electronic volume which can electronically controls functions, such as volume, balance, loudness, fader, bass and treble, using a few number of externally attached parts.

### Outward Form




### Features

*It can control the following functions by 3-line type serial data of CE, DI and CLK. Since serial input is of 5V system, a general purpose microcomputer can be used.

① Volume: 81 positions of 0dB through 79dB (1dB step) and −∞. Provides a balance function by separately controlling L/R.

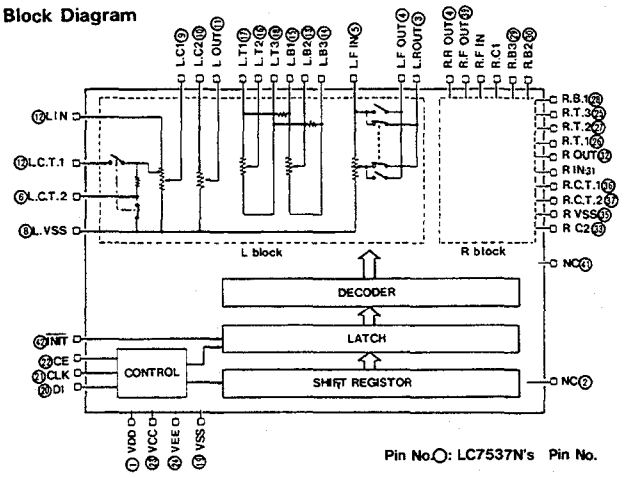
② Loudness: Since there is a center tap at a −20dB position of the ladder resistor of the volume, loudness operation is available by means of an externally attached part for CR.

③ Fader: Provides a fader function by varying only rear output or front output over 16 positions [0dB through −20dB (at 2dB step), −20dB through 45dB (at 5dB step), −60dB and −∞)].

④ Bass/treble: Controls bass and treble at 15 positions by 2dB step, forming an NF type tone control circuit (Baxandall type) through externally attached CR.

*An operationg voltage widely ranges from +4.5V to 15V because of its C-MOS structure, and either unilateral power supply can be used.

### Block Diagram




Pin No.○: LC7537N's Pin No.

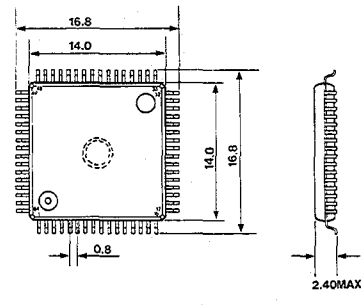
### Terminal Connection Table

| Pin No. LC7537N | Pin No. LC7537AN | Function |
|---|---|---|
| 12<br>31 | 8<br>29 | L.IN<br>R.IN |
| 9<br>34 | 4<br>33 | L.C1<br>R.C1 |
| 10<br>33 | 5<br>32 | L.C2<br>R.C2 |
| 11<br>32 | 6<br>31 | L.OUT<br>R.OUT |
| 5<br>38 | 47<br>38 | L.FIN<br>R.FIN |
| 4<br>3<br>39<br>40 | 46<br>45<br>39<br>40 | L.FOUT<br>L.ROUT<br>R.FOUT<br>R.ROUT |
| 15<br>16<br>14<br>28<br>27<br>29 | 11<br>9<br>10<br>26<br>28<br>27 | L.B1<br>L.B2<br>L.B3<br>R.B1<br>R.B2<br>R.B3 |
| 17<br>16<br>18<br>26<br>27<br>25 | 13<br>12<br>14<br>24<br>25<br>23 | L.T1<br>L.T2<br>L.T3<br>R.T1<br>R.T2<br>R.T3 |

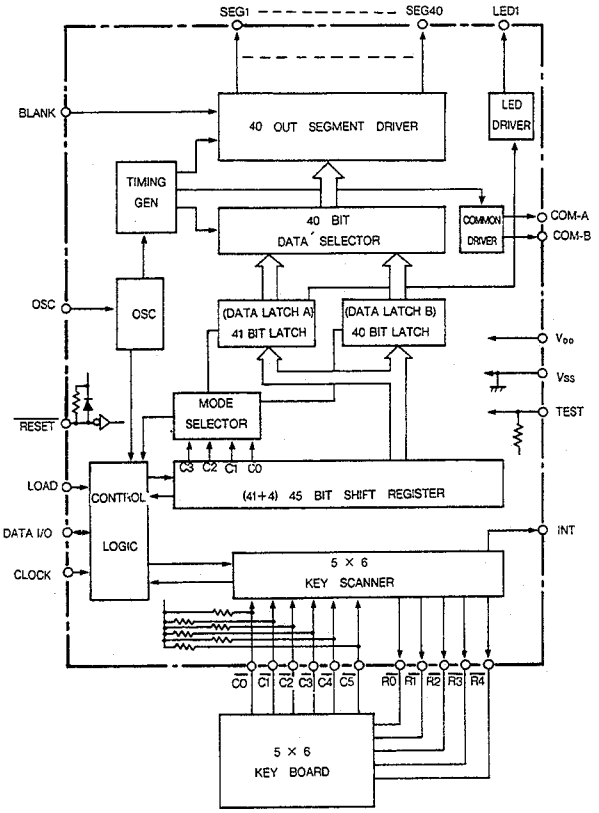
| Pin No. LC7537N | Pin No. LC7537AN | Function |
|---|---|---|
| 7<br>6<br>36<br>37 | 1<br>48<br>36<br>37 | LCT1<br>LCT2<br>RCT1<br>RCT2 |
| 8<br>35 | 2<br>35 | L.Vss<br>R.Vss |
| 42 | 42 | INIT |
| 22 | 20 | CE |
| 20<br>21 | 16<br>17 | DI<br>CLK |
| 1<br>23<br>19<br>24 | 43<br>21<br>15<br>22 | VDD<br>VCC<br>Vss<br>VEE |
| 2<br>41 | 3<br>7<br>18<br>30<br>34<br>41<br>44 | NC |
| – | 19 | VDD(NC) |

## ■MSM6606 051-1794-00 LCD Driver With Key Scan

### Outward Form



## Block Diagram

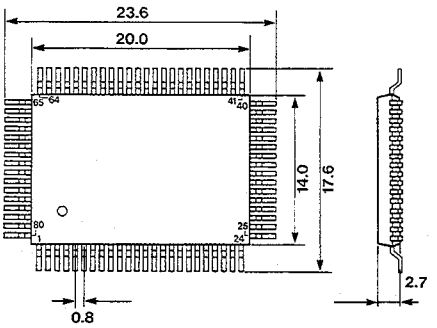



## Terminal Description

| Pin No. | Symbol | Function |
|---|---|---|
| 1 ∫ 40 | SEG1 ∫ SEG40 | Segment signal output terminal. |
| 41 ∫ 46 | C0 ∫ C5 | Key scanner input terminal. |
| 47 ∫ 51 | R0 ∫ R4 | Key scanner output terminal. |
| 52 | LED1 | LED static driver output terminal. |
| 53 | $V_{DD}$ | Power supply voltage terminal. |
| 54 | OSC | Oscillation circuit terminal. |
| 55 | Vss | GND terminal. |
| 56 | TEST | Test terminal. |
| 57 | LOAD | Latch clock of the display data. |
| 58 | CLOCK | Data input terminal to shift register. Data are shifted by 1bit with the trailing edge of the clock terminal. |
| 59 | DATA I/O | Control/display data input terminal. |
| 60 | INT | A terminal which provides microprocessor interrupt signal. Key scanning starts when the key is pressed or released. |
| 61 | BLANK | A terminal which turns all segments off. |
| 62 | RESET | Reset terminal. |
| 63 | COM-B | Common driver output terminal. |
| 64 | COM-A | |

## ■μPD75516GF-481-3B9 051-1795-02 Master Microcomputer

### Outward Form




### Terminal Description

| Pin No. | Symbol | I/O | Function |
|---|---|---|---|
| 1 2 | ANO AVREF | – | Connected to GND. |
| 3 4 | $V_{DD}$ | – | Supply voltage terminal. |
| 5 | CD STOP | O | Output of external accessory stop signal. |
| 6 | D OUT | O | Digital control lead terminal. |
| 7 8 | NC | – | Not in use. |
| 9 | MOTOR ANT | O | Motor antenna control terminal. |
| 10 | AMP REM | O | Amplifier remote output. A signal which switches amplifier and audio powersupply. |
| 11 | +B REM | O | Output of +B remote signal. Output of signal to supply illumination power to the set and remote supply to external accessories. |
| 12 | ACC CONT | O | Output of accessory control signal. Output of interrupt signal to activate accessory microprocessors which control in C-BUS. |
| 20 | BEEP | O | Output of BEEP signal. A terminal which provides BEEP signal to sound buzzer. |
| 13 ∫ 23 | DEST IN 0 ∫ DEST IN 9 | | An initialization terminal which selects Destination IN Port 1 to 9 by connecting to $V_{DD}$ or GND. |
| 24 | NC | – | Not in use. |
| 25 26 27 28 29 | LCD LOAD LCD SCK LCD DATA LCD INT LCD BLANK | O O I/O I O | Output terminal of LCD driver control. |
| 30 | MUTE | O | A terminal which provides system MUTE signal. |
| 31 | MONO | O | A terminal which provides forced AM monoral. |
| 32 | DIVER | O | A terminal which controls diver ON/OFF. |
| 33 | GND | – | Grounding terminal. |
| 34 | NC | – | Not in use. |
| 35 | PLL CE | O | A terminal which provides CE (chip enable) of PLL IC. |
| 36 | PLL DO | O | A terminal which provides data from PLL IC. |
| 37 | PLL SCK | O | A terminal which provides CLK of PLL IC. |

| Destination IN | GND | $V_{DD}$ |
|---|---|---|
| 0 | To Japan with both connected to GND | USA |
| 1 | | Third area |
| 2 | No TV | TV provided |
| 3 | Clock provided | No clock provided |
| 4 | To GFX with both connected to GND | TOMIRM |
| 5 | | TOMIC |
| 6 | Dolby B only | Dolby B/C |
| 7 | No AM stereo | AM stereo provided |
| 8 | No diver | Diver provided |
| 9 | All memories cleared | Normal operation |

| Pin No. | Symbol | I/O | Function |
|---|---|---|---|
| 38 | PLL DI | I | A terminal which receives data from PLL IC. |
| 39 | ST | I | A terminal which receives stereo signal. |
| 40 | NC | – | Not in use. |
| 41 | W ILLUME | O | A terminal which selects illumination color. |
| 42 | NC | – | Not in use. |
| 43<br>44<br>45 | VOL CE<br>VOL DO<br>VOL SCK | O | A serial data output terminal which controls electronic controls. |
| 46 | TEST | I | Test input terminal. |
| 47 | EJECT | I | A terminal which detects EJECT KEY. |
| 48 | TIME BASE | I | A terminal which receives time-base signal. When time base for time counting is received, the terminal detects time base sent from PLL IC to count the clock. |
| 49 | REMOCON | I | A terminal which receives data from remote controller. |
| 50<br>51<br>52 | SBI SI<br>SBI SO<br>SBI SCK | I<br>O<br>O | Serial bus line I/O port. |
| 53 | ACC IN | I | A terminal which detects and receives ACC power supply. |
| 54 | GND | – | Grounding terminal. |
| 55<br>56 | XT1<br>XT2 | –<br>– | Connected to GND.<br>Not in use. |
| 57 | IC | – | Connected to GND. |
| 58<br>59 | X1<br>X2 | – | A crystal/ceramic terminal which oscillates system clock. |
| 60 | RESET | I | A terminal which receives reset signal. |
| 61 | T-SET | I | A terminal which receives tuner control. |
| 62 | FF/REW | I | A terminal which detects and receives FF/REW. |
| 63 | FWD/REV | I | A terminal which detects and receives FWD/REV. |
| 64 | MS OUT | I | A terminal which detects and receives music-to-music interval. |
| 65 | CD/AUX | O | A terminal which selects CD/AUX. |
| 66 | TAPE/TUNER | O | A terminal which selects TARE/TUNER. |
| 67 | DOLBY ON/OFF | O | A terminal which provides dolby ON/OFF signal. |
| 68 | DOLBY B/C | O | A terminal which turns dolby OFF and controls B and C when Dolby ON is selected and also provides Dolby ON/OFF signal when No dolby C is selected. |
| 69 | MTL | O | A terminal which provides metal ON/OFF signal. |
| 70 | APC | O | A terminal which provides APC ON/OFF signal. |
| 71 | MOTOR ON/OFF | O | A terminal which provides mechanical power supply ON/OFF signal. |
| 72 | +5V REM | O | A terminal which provides 5V remote signal. |
| 73 | AVss | – | Connected to GND. |
| 74 | PACK SW | I | A terminal which detects and receives cassette package IN. |
| 75 | SRQ | I | A terminal which receives SRQ signal and interrupt signal from slave microprocessor. |
| 76 | PHONE INT | I | A terminal which receives telephone interrupt signal. |
| 77 | CD REM | I | A terminal which detects and receives CD PLAY signal. |
| 78<br>∫<br>80 | NC | – | Not in use. |

# ■PARTS LIST:

◎Electrical section

◎SWITCH P.W.B

● : 5750 Only

| REF.NO. | PART NO. | DESCRIPTION | Q'TY |
|---|---|---|---|
| D●101,102 | 001-0644-00 | Diode MA113 | 2 |
| IC601 | 051-1794-00 | IC MSM6606 | 1 |

| REF.NO. | PART NO. | DESCRIPTION | Q'TY |
|---|---|---|---|
| C101 | 178-1042-05 | Ceramic chip capacitor 0.1μF | 1 |
| C102 | 178-2232-05 | Ceramic chip capacitor 0.022μF | 1 |

◎MAIN P.W.B

Note) Several different parts listed in the column are alternative parts. One of those parts is used in the set.

| REF.NO. | PART NO. | DESCRIPTION | Q'TY |
|---|---|---|---|
| D506 | 001-0188-01 | Diode 1SS1885A | 1 |
| D404 | 001-0377-48 | Diode MA4091H | 1 |
| | 001-0376-48 | Diode MTZ9.1JC | |
| | 001-0400-48 | Diode HZS9.1JB3 | |
| D103 | 001-0423-24 | Diode MA4091 | 1 |
| D505 | 001-0423-31 | Diode MA4180 | 1 |
| D102 | 001-0503-48 | Diode HZS9C2L | 1 |
| D 301~303 ●401,●402 504 | 001-0516-00 | Diode MA111 | 6 |
| D 501~503 507 | 001-0638-00 | Diode WG713A | 4 |
| | 001-0330-00 | Diode 1SS119 | |
| | 001-0352-00 | Diode 1SS176 | |
| | 001-0352-01 | Diode 1SS178 | |
| L101 | 010-2003-03 | Coil | 1 |
| L501 | 010-2046-44 | Coil 1mH | 1 |
| L102 | 010-2230-38 | Coil 220μH | 1 |
| VR 101,201 202 | 012-4864-06 | Variable resistor 10KΩ | 3 |
| VR102,103 | 012-4864-11 | Variable resistor 220KΩ | 2 |
| C346,359 | 042-0447-00 | Alumi-electrolytic capacitor 16V2200μF | 2 |
| C502 | 042-0505-01 | OS-CON 10V22μF | 1 |
| IC502 | 051-0160-56 | IC HD74LS07FPD | 1 |
| IC 102,302,303 305~308 | 051-0350-55 | IC NJM4558M | 7 |
| IC304 | 051-0866-16 | IC LC7537NE-HT | 1 |
| IC503 | 051-0869-05 | IC MB3771PF | 1 |
| IC504 | 051-1518-00 | IC AN8005M | 1 |
| IC101 | 051-1717-05 | IC LC7219M | 1 |
| IC201 | 051-1777-00 | IC HA12163 | 1 |
| IC501 | 051-1795-02 | IC μPD75516GF-481-3B9 | 1 |
| IC309 | 051-1810-00 | IC HA13150 | 1 |
| IC301 | 051-1811-00 | IC BA3129F | 1 |
| SUP101 | 060-0122-10 | Surge protector | 1 |
| X501 | 060-0266-00 | Ceramic resonator 4.19MHz | 1 |
| X101 | 061-1066-00 | Crystal 7.2MHz | 1 |
| Q303 | 100-1162-00 | Transistor 2SA1162 | 1 |
| | 101-0709-00 | Transistor 2SB709A | |
| Q405 | 100-1431-00 | Transistor 2SA1431 | 1 |
| Q508 | 101-1143-50 | Transistor 2SB1143S | 1 |
| Q103,104,505 | 101-1237-00 | Transistor 2SB1237 | 3 |
| Q507 | 101-1243-50 | Transistor 2SB1243P | 1 |
| Q403 | 102-1846-00 | Transistor 2SC1846 | 1 |
| Q502,510 | 102-2712-00 | Transistor 2SC2712 | 2 |
| | 103-0601-00 | Transistor 2SD601A | |
| Q101,102 | 102-2712-51 | Transistor 2SC2712GL | 2 |

| REF.NO. | PART NO. | DESCRIPTION | Q'TY |
|---|---|---|---|
| Q●406 | 102-3327-00 | Transistor 2SC3327 | 1 |
| | 103-1450-00 | Transistor 2SD1450 | |
| | 103-1504-00 | Transistor 2SD1504 | |
| Q304~309 | 103-1306-00 | Transistor 2SD1306 | 6 |
| | 102-3326-00 | Transistor 2SC3326 | |
| | 103-1328-00 | Transistor 2SD1328 | |
| Q106 | 103-1683-00 | Transistor 2SD1683 | 1 |
| Q509 | 103-1858-00 | Transistor 2SD1858 | 1 |
| Q●407,●408 | 103-1996-00 | Transistor 2SD1996 | 2 |
| Q105 | 108-0241-50 | FET 2SK241-YGR | 1 |
| Q404,508 | 125-2016-02 | Transistor DTC124EL | 2 |
| | 125-2018-02 | Transistor UN6212 | |
| Q501,504 | 125-2020-03 | Transistor DTC124EK | 2 |
| | 125-2004-03 | Transistor RN1403 | |
| | 125-2005-02 | Transistor UN2212 | |
| C●215 | 172-1031-11 | Polyester capacitor 0.01μF | 1 |
| C 210,214 337~345 | 172-1041-11 | Polyester capacitor 0.1μF | 11 |
| C205,206 | 172-1231-11 | Polyester capacitor 0.012μF | 2 |
| C128 | 172-2231-11 | Polyester capacitor 0.022μF | 1 |
| C124,125 | 172-2731-11 | Polyester capacitor 0.027μF | 2 |
| C503 | 172-4731-11 | Polyester capacitor 0.047μF | 1 |
| C130 | 172-5631-11 | Polyester capacitor 0.056μF | 1 |
| C501 | 173-1021-11 | Polyester capacitor 1000PF | 1 |
| C202,203 | 173-4711-11 | Polyester capacitor 470PF | 2 |
| C●211 | 173-4721-11 | Polyester capacitor 4700PF | 1 |
| C 114,116,127 131,132,142 | 176-1011-00 | Ceramic chip capacitor 100PF | 6 |
| C113 | 176-1201-00 | Ceramic chip capacitor 12PF | 1 |
| C112 | 176-1501-00 | Ceramic chip capacitor 15PF | 1 |
| C347,348 | 176-2701-00 | Ceramic chip capacitor 27PF | 2 |
| C143 | 178-1022-05 | Ceramic chip capacitor 1000PF | 1 |
| C 101,109,111 134,138,507 509 | 178-1032-05 | Ceramic chip capacitor 0.01μF | 7 |
| C309,316 | 178-1822-05 | Ceramic chip capacitor 1800PF | 2 |
| C 103,129,136 139~141 405,406,505 508 | 178-2232-05 | Ceramic chip capacitor 0.022μF | 10 |
| C305,314 | 178-3322-05 | Ceramic chip capacitor 3300PF | 2 |
| C135,404 | 178-4732-05 | Ceramic chip capacitor 0.047μF | 2 |
| C349~352 | 178-6812-05 | Ceramic chip capacitor 680PF | 4 |
| C 306,307,315 316 | 178-6832-05 | Ceramic chip capacitor 0.068μF | 4 |
| C354 | 182-1073-13 | Electrolytic capacitor 6.3V100μF | 1 |
| C208 | 183-1053-62 | Electrolytic capacitor 50V1μF | 1 |
| C 104,●217 301,303,335 356~358 360,361,403 | 183-1063-32 | Electrolytic capacitor 16V10μF | 11 |

| REF.NO. | PART NO. | DESCRIPTION | Q'TY |
|---|---|---|---|
| C335 | 183-1063-62 | Electrolytic capacitor 50V10μF | 1 |
| C120,506 | 183-1073-21 | Electrolytic capacitor 10V100μF | 2 |
| C207,212 | 183-2243-61 | Electrolytic capacitor 50V0.22μF | 2 |
| C323,324,327 328 | 183-2256-51 | Electrolytic capacitor 35V2.2μF NP | 4 |
| C304,313 | 183-2263-31 | Electrolytic capacitor 16V22μF | 2 |
| C504 | 183-2263-32 | Electrolytic capacitor 16V22μF | 1 |
| C●216 | 183-3343-61 | Electrolytic capacitor 50V0.33μF | 1 |
| C108 | 183-3353-62 | Electrolytic capacitor 50V3.3μF | 1 |

| REF.NO. | PART NO. | DESCRIPTION | Q'TY |
|---|---|---|---|
| C219,220,325 | 183-3363-21 | Electrolytic capacitor 10V33μF | 3 |
| C126,310,321 | 183-4743-61 | Electrolytic capacitor 50V0.47μF | 3 |
| 105,108,115 117~119 201,204,209 C213,302,308 311,317,319 322 328~334 336 | 183-4753-52 | Electrolytic capacitor 35V4.7μF | 24 |
| C116,121 | 183-4763-32 | Electrolytic capacitor 16V47μF | 2 |
| C107 | 184-2273-21 | Electrolytic capacitor 10V220μF | 1 |

## ● How to read resistor

Resistors are deleted from the table of electric components, (except special resistors).
They can be converted to product Nos. as follows.

**Film resistor (Carbon film resistor/Metal film resistor)**

□□□-□□□-□□

| Classification | Resistance * | Tolerance of the value of resistance | | Rated power | | | Shape | |
|---|---|---|---|---|---|---|---|---|
| 111 (Carbon film resistor) | | 0 | ±2% | 0 | | | 0 | |
| | Example | 1 | ±5% | 1 | 1/8W | Approx. 3.7mm | 1 | Horizontal |
| | 33Ω=330 | 2 | | 2 | 1/4Ws | Approx. 6.5mm | 2 | Vertical |
| | 33kΩ=333 | 3 | | 3 | | | 3 | |
| | | 4 | | 4 | 1/2W | Approx. 9mm | 4 | |
| | | | | 7 | 1/6W | Approx. 3.5mm | | |
| | | | | 8 | 1/2Ws | Approx. 6.6mm | | |
| | | | | 9 | 1/4Wss | Approx. 3.2mm | | |
| 114 (Metal film resistor) | | 0 | | 1 | 1W | Approx. 9.0mm | 0 | |
| | | 1 | ±5% | 2 | 2W | Approx. 11.0mm | 1 | Horizontal |
| | | 2 | | 3 | 3W | Approx. 15.0mm | 2 | |

**(Example)**

Carbon film resistor | 1kΩ | ±5% | 1/4Wss | Vertical

1 1 1 - 1 0 2 1 - 9 2

Note 1. The first two of three digits representing resistance are effective digits and the last one represents number of "0" following this.
Unit is given in ohm (Ω).

**Chip resistor**

□□□-□□□-□ 0

| Classification | Resistance * | Tolerance of the value of resistance | | Rated power | | |
|---|---|---|---|---|---|---|
| 116 | Example | 0 | for 0Ω resistor | 0 | for 0Ω resistor | |
| | 33Ω=330 | 1 | ±5% | 1 | 1/8W | 1.6mm, 3.2mm |
| | 33kΩ=333 | 2 | ±10% | 2 | | |
| 117 | | 0 | for 0Ω resistor | 0 | for 0Ω resistor | |
| | | 1 | ±5% | 1 | 1/10W | 1.25mm, 2.0mm |
| | | 2 | ±10% | 2 | | |
| 118 | | 0 | | 0 | | |
| | | 1 | ±5% | 1 | 1/2W | 3.2mm, 4.5mm |
| | | 2 | ±10% | 2 | | |
| 119 | | 0 | for 0Ω resistor | 0 | for 0Ω resistor | |
| | | 1 | ±5% | 1 | 1/16W | 0.8mm, 1.6mm |
| | | 2 | ±10% | 2 | | |

**(Example)**

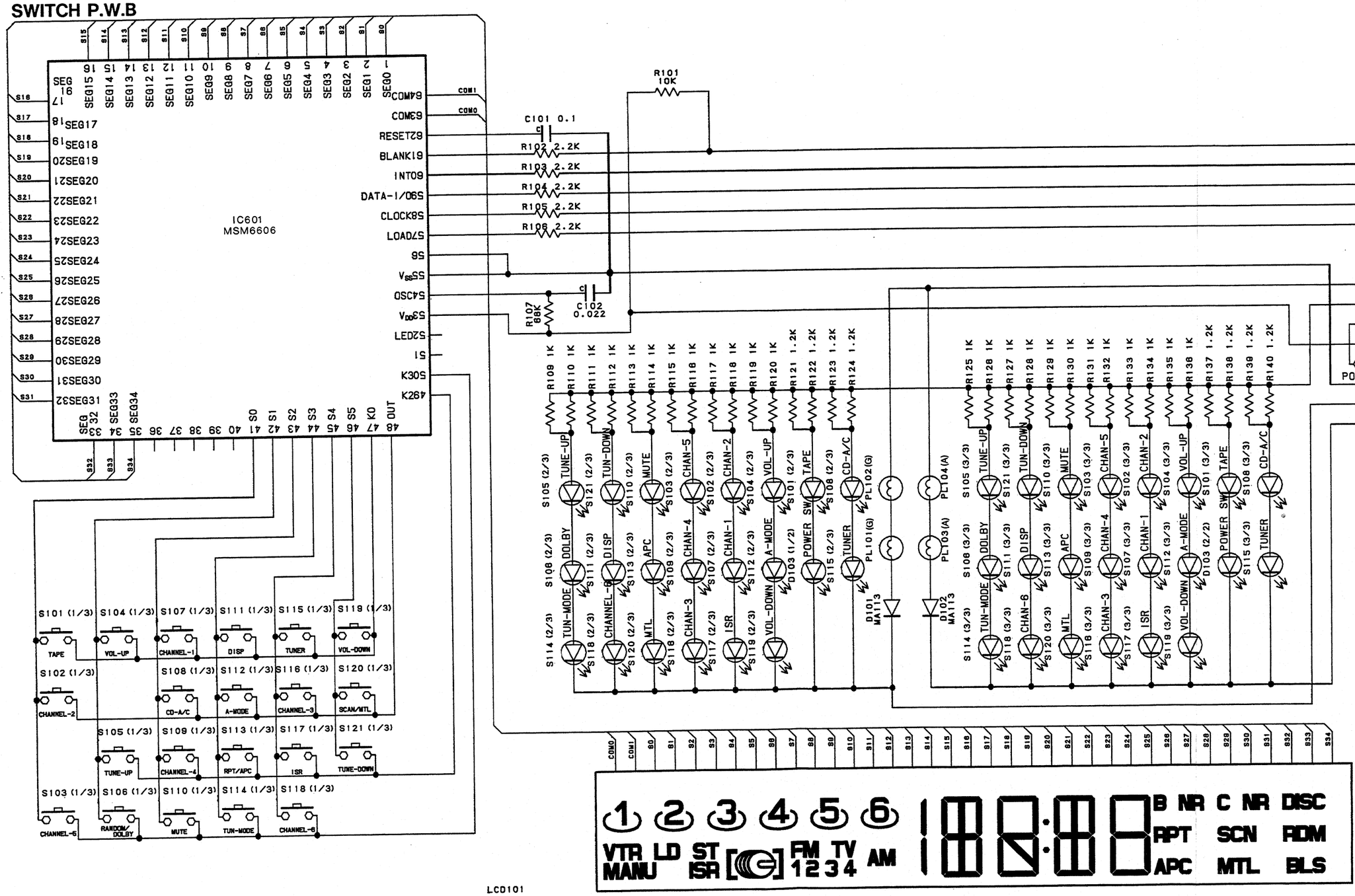
Chip resistor (3.2mm×1.6mm) | 1kΩ | ±5% | 1/8W

1 1 6 - 1 0 2 1 - 1 0

# ■CIRCUIT DIAGRAM: 1/2

◎5750

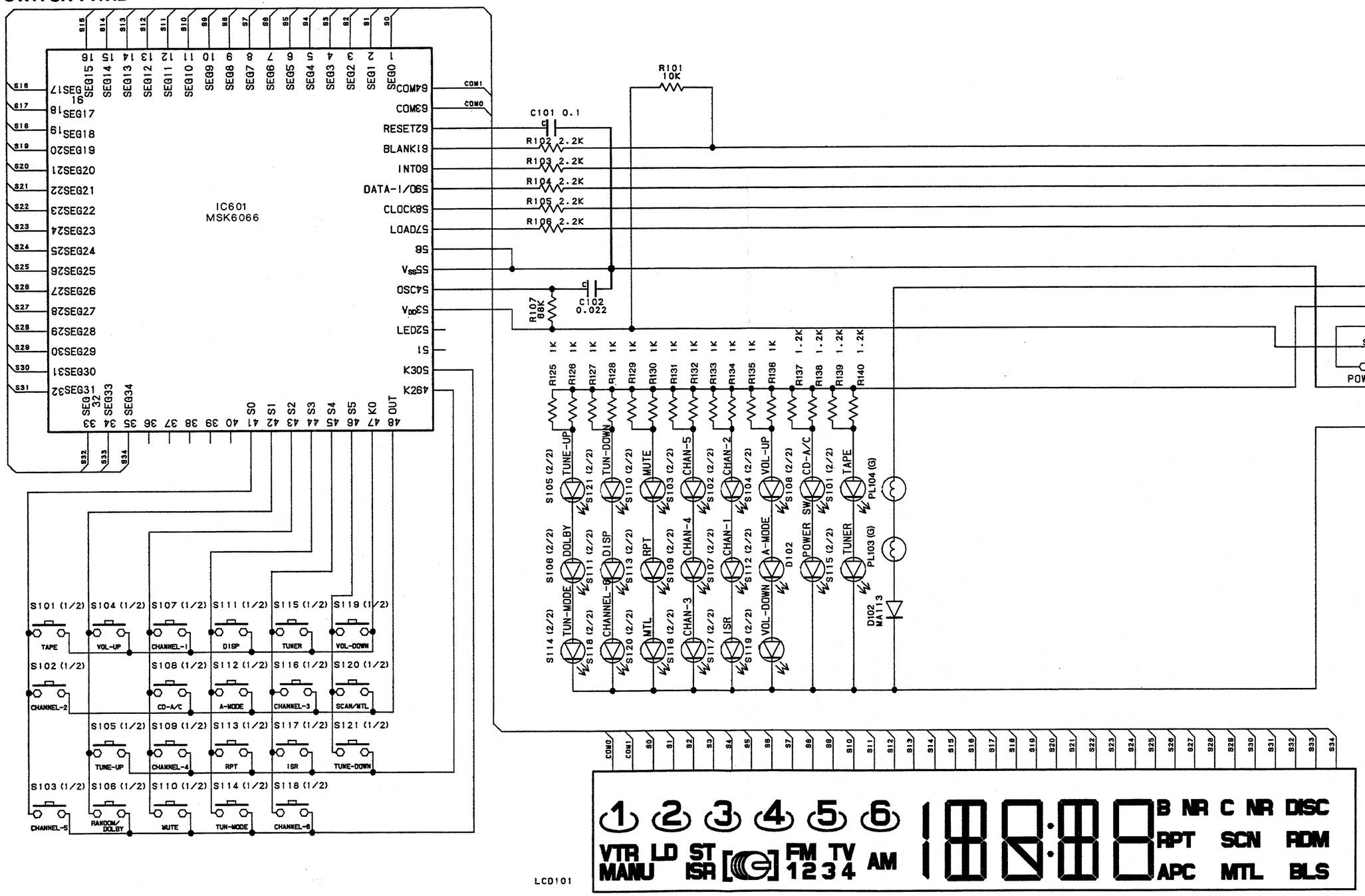
## SWITCH P.W.B



# ■CIRCUIT DIAGRAM: 1/2

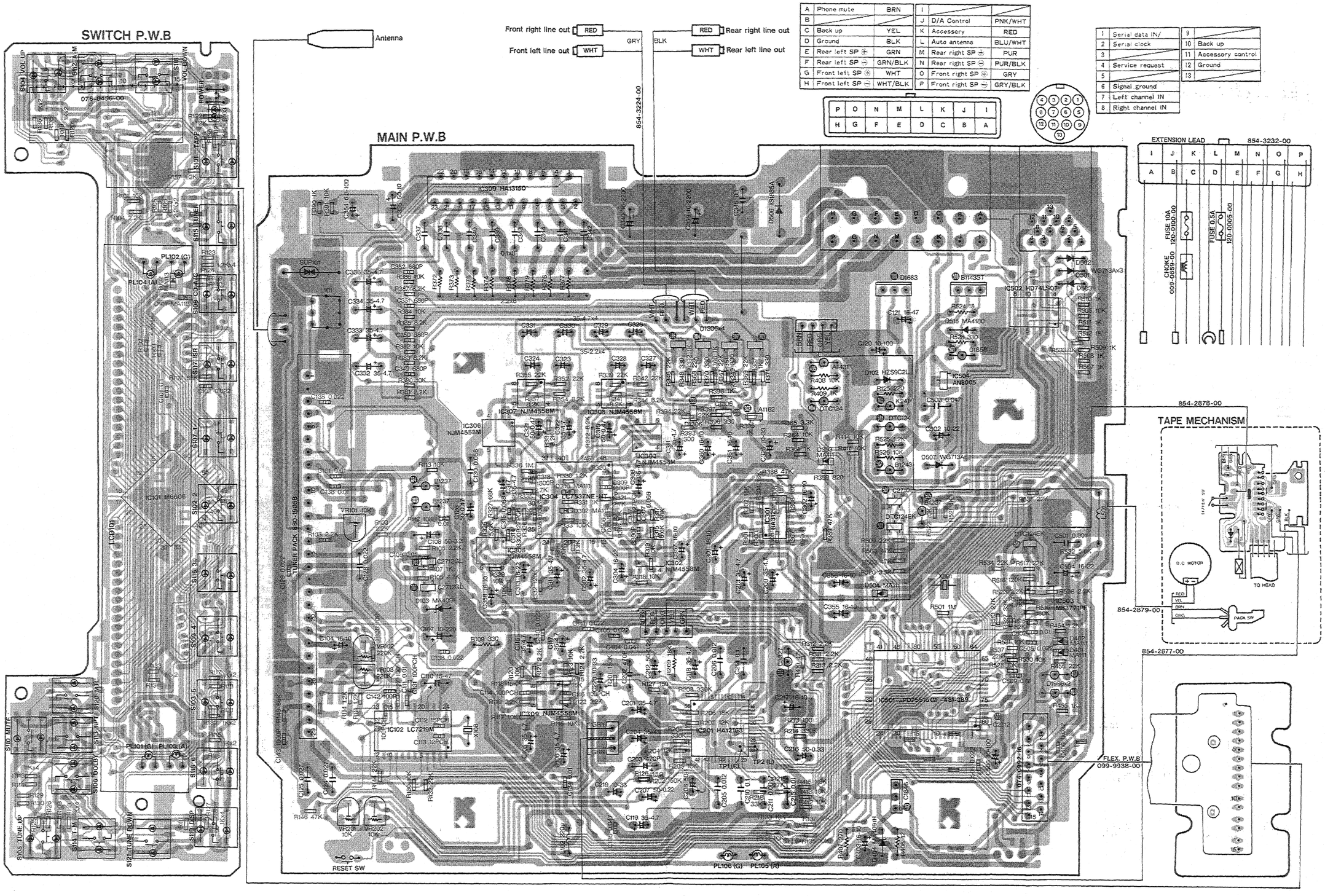
◎5740/3680RC

## SWITCH P.W.B



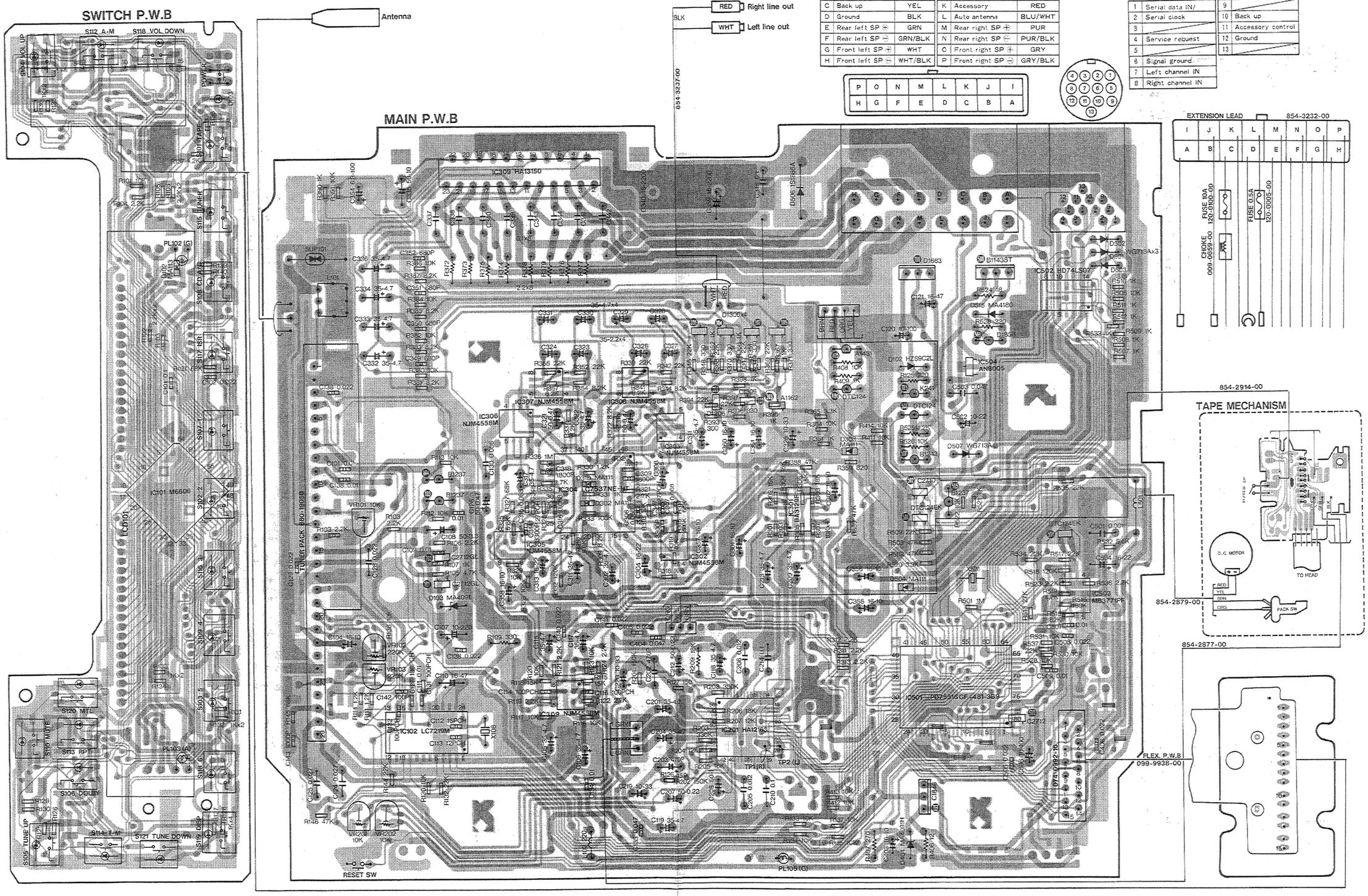
## ■PRINTED WIRING BOARD:

◎5750



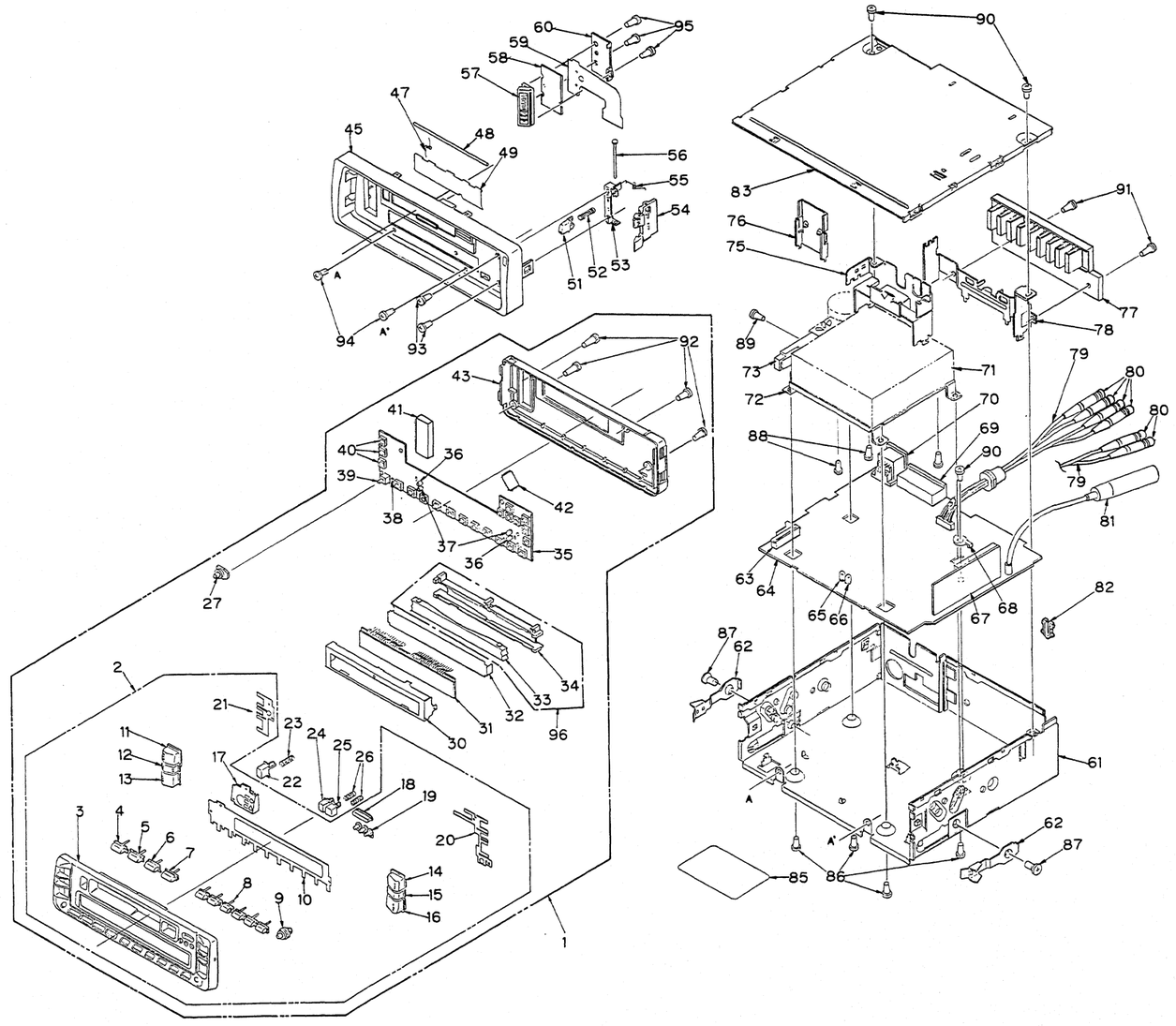
## ■PRINTED WIRING BOARD:

◎5740/3680RC



## ■EXPLODED VIEW • PARTS LIST:

◎Main section




| REF.NO. | PART NO. | DESCRIPTION | Q'TY |
|---|---|---|---|
| 1 | DCP-009-300 | DCP ass'y (5750) | 1 |
| | DCP-001-300 | DCP ass'y (5740/3680RC) | |
| 2 | 940-3316-00 | Escutcheon ass'y (5750) | 1 |
| | 940-3316-01 | Escutcheon ass'y (5740/3680RC) | |
| 3 | 370-5431-00 | Escutcheon (5750) | 1 |
| | 370-5431-01 | Escutcheon (5740/3680RC) | |
| 4 | 382-3316-00 | Button (TAPE) | 1 |
| 5 | 382-3317-00 | Button (TUNER) | 1 |
| 6 | 382-3318-00 | Button (CHANGER) | 1 |
| 7 | 382-3319-00 | Button (ISR) | 1 |
| 8 | 382-3321-00 | Button (RESET) | 1 |
| 9 | 382-3323-00 | Button (DISP) | 1 |
| 10 | 373-0727-00 | Dial cover (5750) | 1 |
| | 373-0727-01 | Dial cover (5740/3680RC) | |

| REF.NO. | PART NO. | DESCRIPTION | Q'TY |
|---|---|---|---|
| 11 | 382-3312-00 | Button ( ∧ ) | 1 |
| 12 | 382-3311-00 | Button (A·M) | 1 |
| 13 | 382-3313-00 | Button ( ∨ ) | 1 |
| 14 | 382-3314-00 | Button ( ⩓ ) | 1 |
| 15 | 382-3310-00 | Button (T·M) | 1 |
| 16 | 382-3315-03 | Button ( ⩔ ) | 1 |
| 17 | 335-4465-01 | Button holder | 1 |
| 18 | 382-3329-00 | Button (▶/❚❚) | 1 |
| 19 | 382-3320-00 | Button | 1 |
| 20 | 347-3823-00 | Film holder (R) | 1 |
| 21 | 347-3822-00 | Film holder (L) | 1 |
| 22 | 382-3324-00 | Button (EJECT) | 1 |
| 23 | 750-3074-00 | Spring (EJECT) | 1 |
| 24 | 382-3326-00 | Button (REW) | 1 |

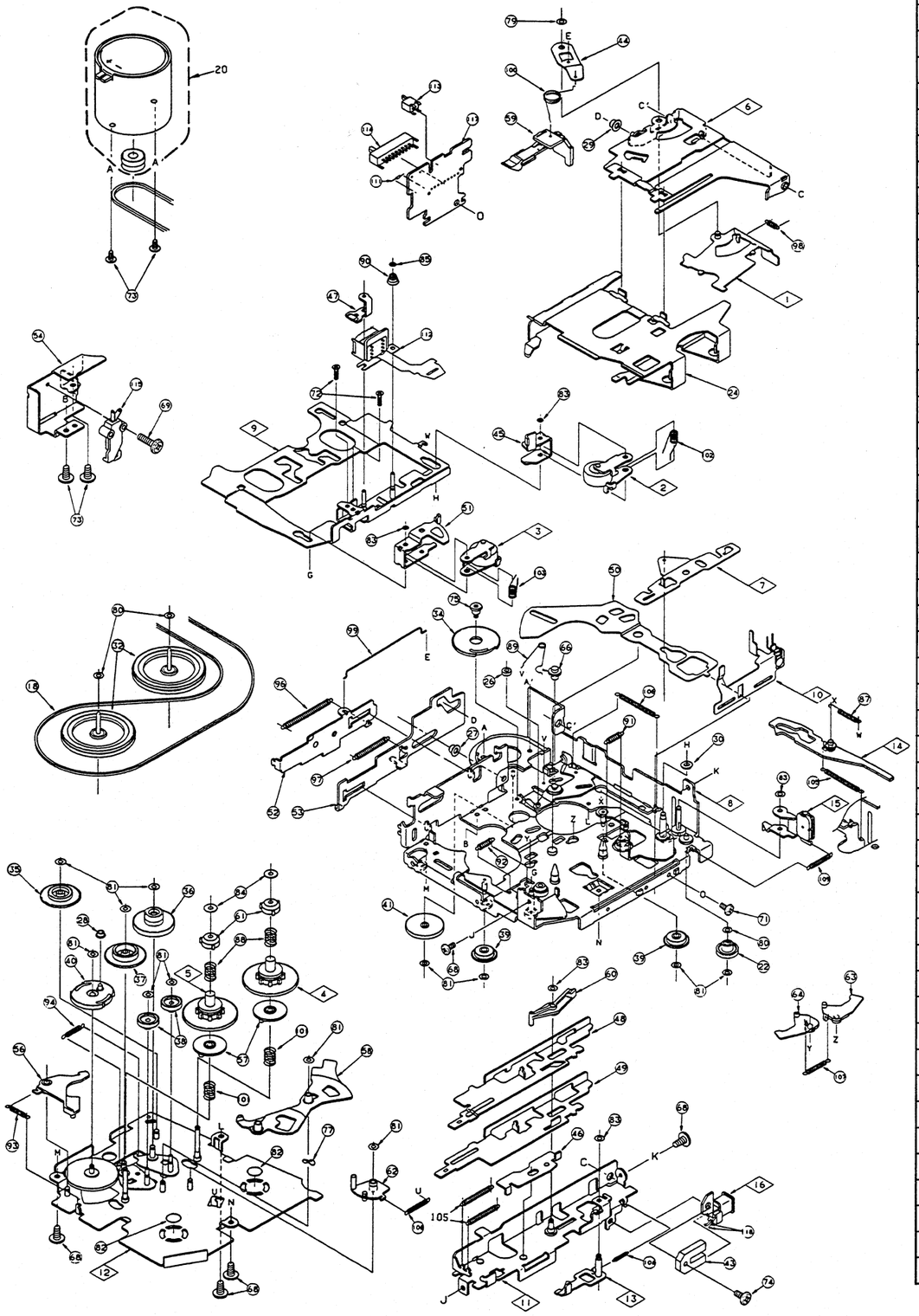
| REF.NO. | PART NO. | DESCRIPTION | Q'TY |
|---|---|---|---|
| 25 | 382-3325-00 | Button (FF) | 1 |
| 26 | 750-3075-00 | Spring (FF•REW) | 2 |
| 27 | 382-3322-00 | Button (POWER) | 1 |
| 30 | 331-0129-00 | Shield plate | 1 |
| 31 | 379-0425-00 | Indicator | 1 |
| 32 | 347-3821-00 | Film | 1 |
| 33 | 335-4452-00 | Illumination plate | 1 |
| 34 | 335-4451-00 | LCD holder | 1 |
| 35 | 099-9979-01 | Switch P.W.B | 1 |
| 36 | 017-0426-00 | Pilot lamp (A 4V/5750) | 2 |
| | 017-0426-01 | Pilot lamp (G 4V/5740/3680RC) | |
| 37 | 017-0426-01 | Pilot lamp (G 4V/5750) | 2 |
| 38 | 001-0593-01 | Diode (5750) | 1 |
| | 001-0647-01 | Diode (5740/3680RC) | |

| REF.NO. | PART NO. | DESCRIPTION | Q'TY |
|---|---|---|---|
| 39 | 013-3849-00 | Switch (POWER) | 1 |
| 40 | 013-3977-11 | Switch (5750) | 21 |
| | 013-3977-01 | Switch (5740/3680RC) | |
| 41 | 076-0456-00 | Plug | 1 |
| 42 | 051-1794-00 | IC | 1 |
| 43 | 335-4447-00 | Rear cover | 1 |
| 45 | 940-3315-00 | Outer escutcheon ass'y | 1 |
| 47 | 750-2530-03 | Spring | 1 |
| 48 | 341-1278-00 | Shaft | 1 |
| 49 | 320-0485-29 | Dustproof cover (5750) | 1 |
| | 320-0485-34 | Dustproof cover (5740) | |
| | 320-0485-35 | Dustproof cover (3680RC) | |
| 51 | 382-3327-01 | Button | 1 |
| 52 | 750-3076-00 | Spring | 1 |
| 53 | 331-0143-00 | Hook holder | 1 |
| 54 | 335-4449-00 | Hook | 1 |
| 55 | 750-3064-00 | Spring | 1 |
| 56 | 341-1492-00 | Shaft | 1 |
| 57 | 074-1021-00 | Outlet socket | 1 |
| 58 | 099-9939-00 | P.W.B | 1 |
| 59 | 099-9938-00 | Flexible P.W.B | 1 |
| 60 | 331-0151-00 | DCP holder | 1 |
| 61 | 311-1584-01 | Lower case | 1 |
| 62 | 750-3060-00 | Spring | 2 |
| 63 | 074-0992-16 | Outlet socket | 1 |
| 64 | 099-9978-03 | Main P.W.B | 1 |
| 65 | 017-0416-04 | Pilot lamp (A 14V/5750) | 1 |
| | 017-0416-03 | Pilot lamp (G 14V/5740/3680RC) | |
| 66 | 017-0416-03 | Pilot lamp (G 14V/5750) | 1 |
| 67 | 880-1950B | Tuner pack | 1 |
| 68 | 073-0689-00 | Terminal | 1 |
| 69 | 074-1023-16 | Plug (16P) | 1 |
| 70 | 074-1022-01 | Outlet socket (13P) | 1 |
| 71 | 930-0703-80 | Tape mechanism (5750) | 1 |
| | 930-0701-80 | Tape mechanism (5740/3680RC) | |
| 72 | 330-9908-00 | Mechanism bracket | 1 |
| 73 | 335-4450-00 | Spacer (EJECT) | 1 |
| 75 | 331-0135-00 | Connector holder | 1 |
| 76 | 313-1477-01 | Heat sink | 1 |
| 77 | 313-1542-00 | Heat sink | 1 |
| 78 | 331-0134-00 | IC holder | 1 |
| 79 | 854-3224-00 | Extension lead (RCA 4CH/5750) | 1 |
| | 854-3237-00 | Extension lead (RCA 2CH/5740/3680RC) | |
| 80 | 345-3799-00 | RCA cap | 4 (2) |
| 81 | 092-0658-00 | Antenna receptacle | 1 |
| 82 | 335-0580-00 | Lead holder | 1 |
| 83 | 303-0427-00 | Upper cover | 1 |
| 85 | 286-7971-00 | Set plate (5750) | 1 |
| | 286-7986-00 | Set plate (5740) | |
| | 286-7987-00 | Set plate (3680RC) | |
| 86 | 714-2605-81 | Machine screw (M2.6x5) | 4 |
| 87 | 731-3006-40 | Tap tight (M3x6) | 2 |
| 88 | 714-3004-80 | Machine screw (M3x4) | 3 |
| 89 | 716-1619-00 | Screw (M2.6x6) | 1 |
| 90 | 731-2606-80 | Tap tight (M2.6x6) | 3 |
| 91 | 731-3010-80 | Tap tight (M3x10) | 2 |
| 92 | 716-1555-02 | Wave screw (M2x8) | 4 |
| 93 | 714-2605-19 | Machine screw (M2.6x5) | 2 |
| 94 | 714-2004-19 | Machine screw (M2x4) | 2 |
| 95 | 716-0778-00 | Wave screw (M2x6) | 3 |
| 96 | 947-0354-00 | Illumi ass'y | 1 |

## ■EXPLODED VIEW • PARTS LIST:

◎Tape mechanism section 930-0703-80 (TOM- I -RM)

**◎5750**



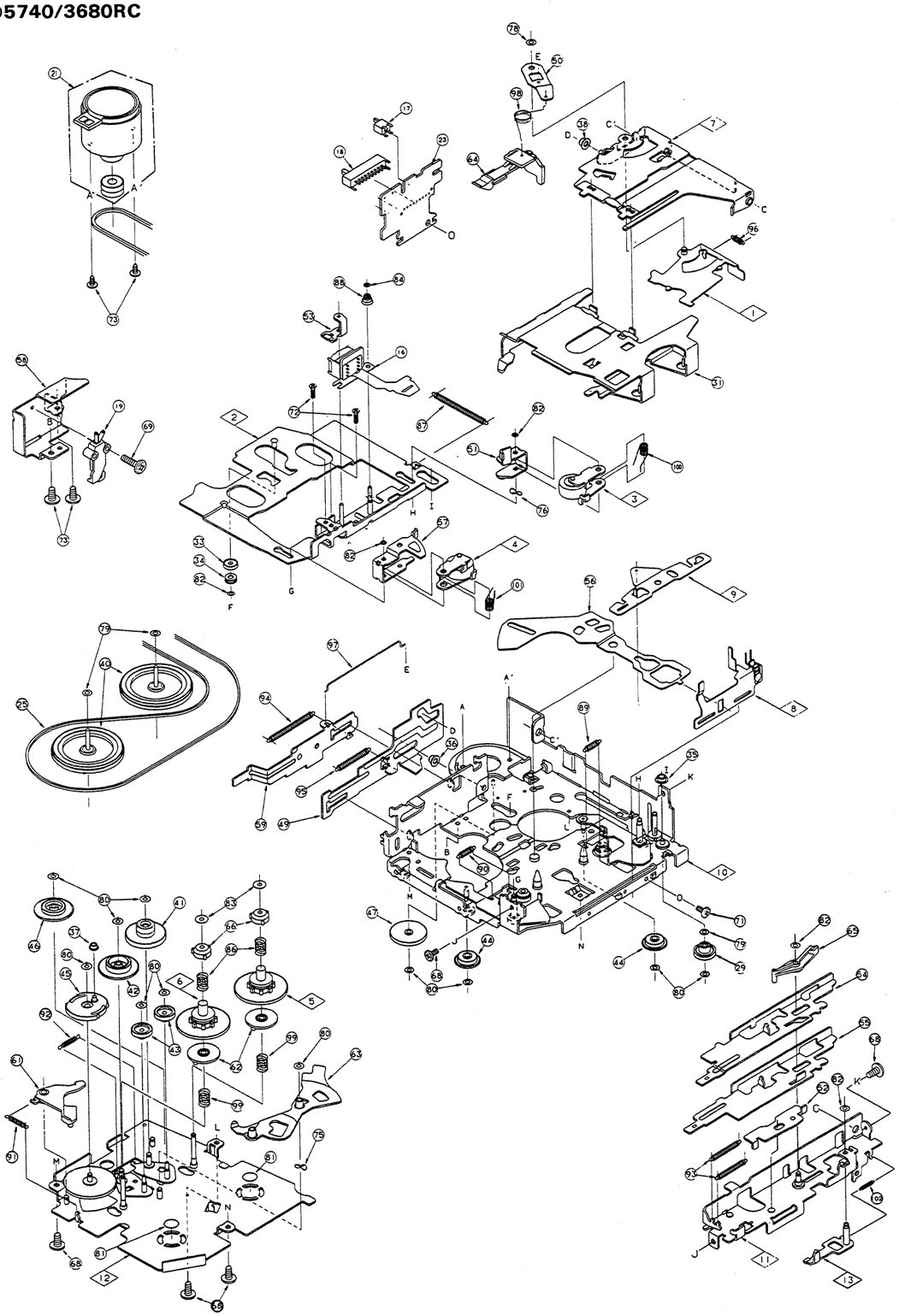
| REF.NO. | PART NO. | DESCRIPTION | Q'TY |
|---|---|---|---|
| 1 | 960-4141-03 | Off arm ass'y | 1 |
| 2 | 960-4146-02 | Roller F-ass'y | 1 |
| 3 | 960-4147-02 | Roller R-ass'y | 1 |
| 4 | 960-4154-04 | Reel F-ass'y | 1 |
| 5 | 960-4155-04 | Reel R-ass'y | 1 |
| 6 | 960-4194-02 | Guide arm ass'y | 1 |
| 7 | 960-4203-02 | Change-L-ass'y | 1 |
| 8 | 960-4309-01 | Deck-P-ass'y-RM | 1 |
| 9 | 960-4312-02 | Head-P-ass'y | 1 |
| 10 | 960-4313-03 | HD-SW-P-ass'y | 1 |
| 11 | 960-4314-02 | Frame ass'y | 1 |
| 12 | 960-4315-01 | Bottom-P-ass'y | 1 |
| 13 | 960-4316-02 | Lock-A-ass'y | 1 |
| 14 | 960-4317-01 | Shift-P-ass'y | 1 |
| 15 | 960-4318-00 | Plunger-L-ass'y | 1 |
| 16 | 960-3392-02 | Coil ass'y | 1 |
| 18 | 602-0113-01 | Belt | 1 |
| 20 | SMA-135-100 | Motor ass'y | 1 |
| 22 | 604-0024-00 | Pulley | 1 |
| 24 | 606-0092-02 | Pack guide | 1 |
| 26 | 610-0293-01 | Power roller | 1 |
| 27 | 610-0326-00 | Eject roller | 1 |
| 28 | 610-0328-00 | CH roller | 1 |
| 29 | 610-0337-00 | Guide-A-roller | 1 |
| 30 | 610-0346-00 | Head-G-roller | 1 |
| 32 | 611-0087-03 | Flywheel | 2 |
| 34 | 613-0094-01 | Power gear | 1 |
| 35 | 613-0258-03 | Gear B | 1 |
| 36 | 613-0259-02 | Gear F | 1 |
| 37 | 613-0260-02 | Gear R | 1 |
| 38 | 613-0261-01 | Idler gear | 2 |
| 39 | 613-0262-01 | FF/REW gear | 2 |
| 40 | 613-0264-02 | CH gear | 1 |
| 41 | 613-0304-00 | Gear A | 1 |
| 43 | 630-1479-02 | Core | 1 |
| 44 | 630-2419-02 | Swing arm | 1 |
| 45 | 630-2422-04 | Release link | 1 |
| 46 | 630-2424-04 | Select link | 1 |
| 47 | 630-2427-01 | Azimuth link | 1 |
| 48 | 630-2678-00 | FF lever-DCP | 1 |
| 49 | 630-2679-00 | REW lever-DCP | 1 |
| 50 | 630-2432-02 | Change plate | 1 |
| 51 | 630-2436-04 | REW link | 1 |
| 52 | 630-2445-01 | Eject lever-CR | 1 |
| 53 | 630-2645-00 | Eject plate RM | 1 |
| 54 | 630-2648-01 | Switch base RM | 1 |
| 56 | 631-0653-01 | Lock link | 1 |
| 57 | 631-0656-03 | Check plate | 2 |
| 58 | 631-0657-02 | Check link | 1 |
| 59 | 631-0658-01 | Pack stopper | 1 |

| REF.NO. | PART NO. | DESCRIPTION | Q'TY |
|---|---|---|---|
| 60 | 631-0659-03 | Mute link | 1 |
| 61 | 631-1967-00 | Slide bush | 2 |
| 62 | 631-2013-01 | Cancel link | 1 |
| 63 | 631-2014-01 | Brake-F | 1 |
| 64 | 631-2015-00 | Brake-R | 1 |
| 66 | 632-1886-02 | Lock pin | 1 |
| 68 | 714-2003-81 | Machine screw (M2x3) | 5 |
| 69 | 714-2008-81 | Machine screw (M2x8) | 1 |
| 71 | 716-0891-01 | P.W.B screw | 1 |
| 72 | 716-1432-00 | Screw (AZIMUTH) | 2 |
| 73 | 716-0484-02 | Motor screw | 4 |
| 74 | 716-1560-00 | Plunger screw | 1 |
| 75 | 716-1578-00 | Screw (POWER GEAR) | 1 |
| 77 | 745-0586-03 | Spring washer (CHECK LINK) | 1 |
| 79 | 746-0622-01 | Washer (OFF ARM) | 1 |
| 80 | 746-0624-00 | Washer (0.25) | 3 |
| 81 | 746-0761-00 | Washer | 12 |
| 82 | 746-0767-00 | Washer (FLYWHEEL) | 2 |
| 83 | 746-0768-00 | Washer (0.5 WARI) | 5 |
| 84 | 746-0813-00 | Poly-washer (REEL-ASS'Y) | 2 |
| 85 | 746-0832-00 | Washer (HEAD) | 1 |
| 87 | 750-2537-02 | Over-P-spring | 1 |
| 88 | 750-2564-01 | Slide spring | 2 |
| 89 | 750-2568-00 | Lock spring | 1 |
| 90 | 750-2848-00 | Azimuth spring | 1 |
| 91 | 750-2849-02 | FF P-spring | 1 |
| 92 | 750-2850-99 | REW-P-spring | 1 |
| 93 | 750-2852-01 | Lock-L-spring | 1 |
| 94 | 750-2853-01 | Idler-P-spring | 1 |
| 96 | 750-2857-02 | Eject-L-spring | 1 |
| 97 | 750-2858-01 | Eject-P-spring | 1 |
| 98 | 750-2859-00 | Off arm spring | 1 |
| 99 | 750-2860-01 | Lod spring | 1 |
| 100 | 750-2861-01 | Slot in spring | 2 |
| 101 | 750-2919-02 | Check spring-R | 1 |
| 102 | 750-2920-01 | Pinch spring-F | 1 |
| 103 | 750-2921-01 | Pinch spring-R | 1 |
| 104 | 750-3010-01 | Lock-A-spring | 1 |
| 105 | 750-3011-00 | Shift-P-spring | 3 |
| 106 | 750-3012-00 | Power-P-spring | 1 |
| 107 | 750-3013-00 | Brake spring | 1 |
| 108 | 750-3014-00 | Cancel spring | 1 |
| 109 | 750-3015-01 | Plunger spring | 1 |
| 111 | 001-0330-00 | Diode | 1 |
| 112 | 011-0307-29 | Head | 1 |
| 113 | 013-3906-00 | Switch (MUTE) | 1 |
| 114 | 013-3922-00 | Switch (SLIDE) | 1 |
| 115 | 013-3924-00 | Switch (MAIN) | 1 |
| 117 | 099-9573-01 | P.W.B | 1 |
| 118 | 800-0607-60 | Vinyl-coat-wire | 2 |

# ■EXPLODED VIEW • PARTS LIST:

◎Tape mechanism section 930-0701-80 (TOM- I -C)

**◎5740/3680RC**

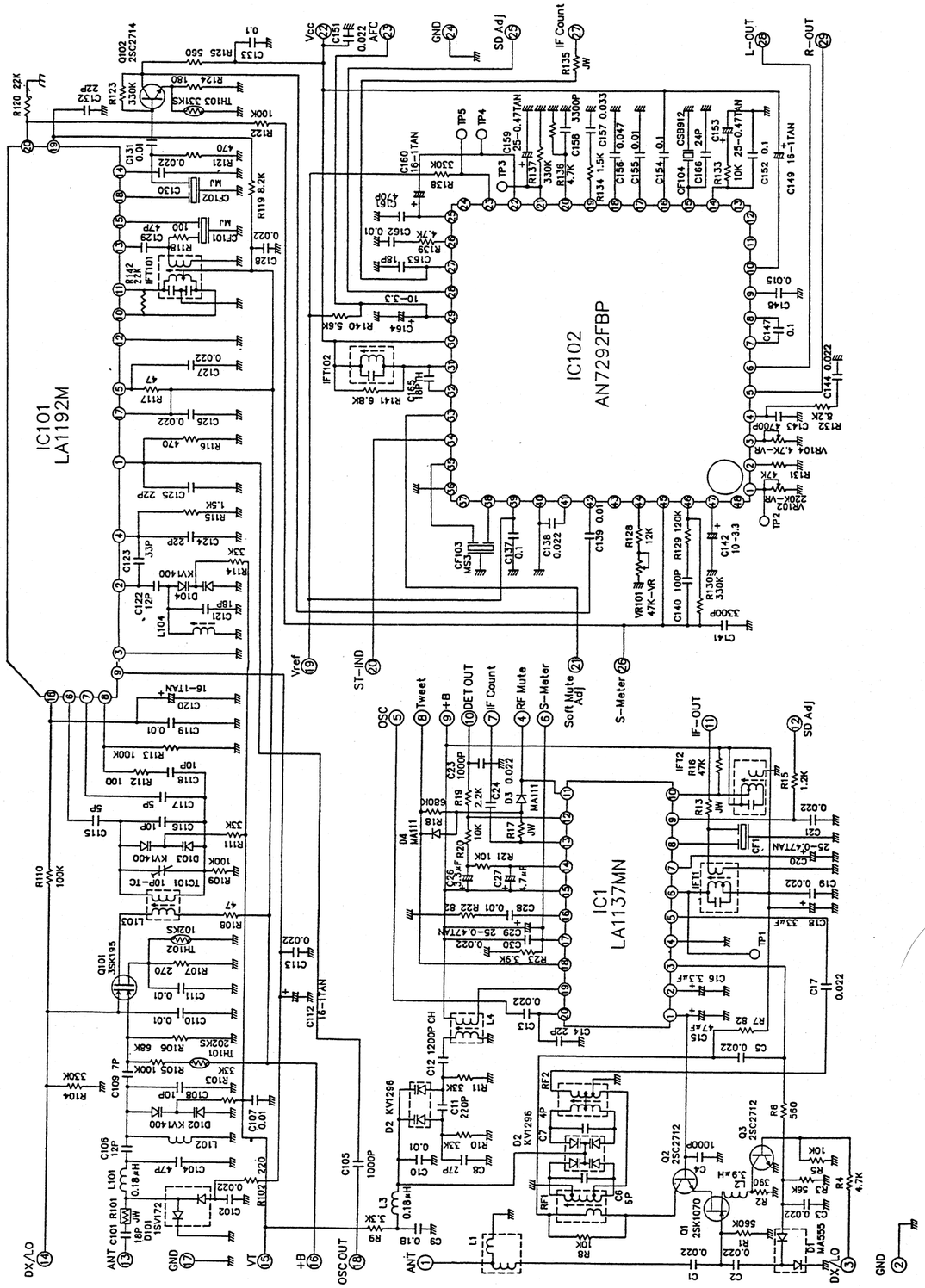


| REF.NO. | PART NO. | DESCRIPTION | Q'TY |
|---|---|---|---|
| 1 | 960-4141-03 | Off arm ass'y | 1 |
| 2 | 960-4143-06 | Head-P-ass'y | 1 |
| 3 | 960-4146-02 | Roller-F-ass'y | 1 |
| 4 | 960-4147-02 | Roller-R-ass'y | 1 |
| 5 | 960-4154-04 | Reel-F-ass'y | 1 |
| 6 | 960-4155-04 | Reel-R-ass'y | 1 |
| 7 | 960-4194-02 | Guide arm ass'y | 1 |
| 8 | 960-4313-03 | HD-SW-P-ass'y | 1 |
| 9 | 960-4203-02 | Change-L-ass'y | 1 |
| 10 | 960-4309-12 | Deck-P-ass'y-C | 1 |
| 11 | 960-4314-02 | Frame ass'y | 1 |
| 12 | 960-4315-12 | Bottom-P-ass'y-C | 1 |
| 13 | 960-4316-02 | Lock-A-ass'y | 1 |
| 16 | 011-0307-29 | Head | 1 |
| 17 | 013-3906-00 | Switch | 1 |
| 18 | 013-3922-00 | Switch | 1 |
| 19 | 013-3924-00 | Switch | 1 |
| 21 | SMA-135-100 | Motor ass'y | 1 |
| 23 | 099-9573-01 | P.W.B | 1 |
| 25 | 602-0113-01 | Belt | 1 |
| 29 | 604-0024-00 | Pulley | 1 |
| 31 | 606-0092-02 | Pack guide | 1 |
| 33 | 610-0034-00 | Head-P-roller | 1 |
| 34 | 610-0324-00 | Head-G-roller A | 1 |
| 35 | 610-0325-00 | Head-G-roller B | 1 |
| 36 | 610-0326-00 | Eject roller | 1 |
| 37 | 610-0328-00 | CH roller | 1 |
| 38 | 610-0337-00 | Guide-A-roller | 1 |
| 40 | 611-0087-03 | Flywheel | 2 |
| 41 | 613-0259-02 | Gear F | 1 |
| 42 | 613-0260-02 | Gear R | 1 |
| 43 | 613-0261-01 | Idler gear | 2 |
| 44 | 613-0262-01 | FF/REW gear | 2 |
| 45 | 613-0264-02 | CH gear | 1 |
| 46 | 613-0258-03 | Gear B | 1 |
| 47 | 613-0304-10 | Gear A | 1 |
| 49 | 630-2417-02 | Eject plate | 1 |
| 50 | 630-2419-02 | Swing arm | 1 |
| 51 | 630-2422-04 | Release link | 1 |
| 52 | 630-2424-04 | Select link | 1 |
| 53 | 630-2427-01 | Azimuth link | 1 |
| 54 | 630-2678-00 | FF lever-DCP | 1 |

| REF.NO. | PART NO. | DESCRIPTION | Q'TY |
|---|---|---|---|
| 55 | 630-2679-00 | REW lever-DCP | 1 |
| 56 | 630-2432-02 | Change plate | 1 |
| 57 | 630-2436-04 | REW link | 1 |
| 58 | 630-2440-01 | Switch base | 1 |
| 59 | 630-2445-01 | Eject lever-CR | 1 |
| 61 | 631-0653-01 | Lock link | 1 |
| 62 | 631-0656-03 | Check plate | 2 |
| 63 | 631-0657-02 | Check link | 1 |
| 64 | 631-0658-01 | Pack stopper | 1 |
| 65 | 631-0659-03 | Mute link | 1 |
| 66 | 631-1967-00 | Slide bush | 2 |
| 68 | 714-2003-81 | Machine screw (M2x3) | 5 |
| 69 | 714-2008-81 | Machine screw (M2x8) | 1 |
| 71 | 716-0891-01 | P.W.B screw | 1 |
| 72 | 716-1432-00 | Screw (AZIMUTH) | 2 |
| 73 | 716-0484-02 | Screw | 4 |
| 75 | 745-0586-03 | Spring washer (CHECK L) | 1 |
| 76 | 745-0748-01 | Washer (RELEASE L) | 1 |
| 78 | 746-0622-01 | Washer (OFF ARM) | 1 |
| 79 | 746-0624-00 | Washer | 3 |
| 80 | 746-0761-00 | Washer | 11 |
| 81 | 746-0767-00 | Washer (FLYWHEEL) | 2 |
| 82 | 746-0768-00 | Washer | 5 |
| 83 | 746-0813-00 | Poly-washer | 2 |
| 84 | 746-0832-00 | Washer (AZIMUTH) | 1 |
| 86 | 750-2564-01 | Slide spring | 2 |
| 87 | 750-2847-01 | Head P-spring | 1 |
| 88 | 750-2848-00 | Azimuth spring | 1 |
| 89 | 750-2849-02 | FF P-spring | 1 |
| 90 | 750-2850-01 | REW P-spring | 1 |
| 91 | 750-2852-01 | Lock L-spring | 1 |
| 92 | 750-2853-01 | Idler P-spring | 1 |
| 93 | 750-2854-01 | FF/REW spring | 2 |
| 94 | 750-2857-02 | Eject L-spring | 1 |
| 95 | 750-2858-01 | Eject P-spring | 1 |
| 96 | 750-2859-00 | Off arm spring | 1 |
| 97 | 750-2860-01 | Lod spring | 1 |
| 98 | 750-2861-01 | Slot in spring | 1 |
| 99 | 750-2919-02 | Check spring-R | 2 |
| 100 | 750-2920-01 | Pinch spring-F | 1 |
| 101 | 750-2921-01 | Pinch spring-R | 1 |
| 102 | 750-3010-01 | Lock A-spring | 1 |

## ■BLOCK CIRCUIT DIAGRAM:

### ◎AM/FM TUNER BLOCK Ass'y 880-1950B



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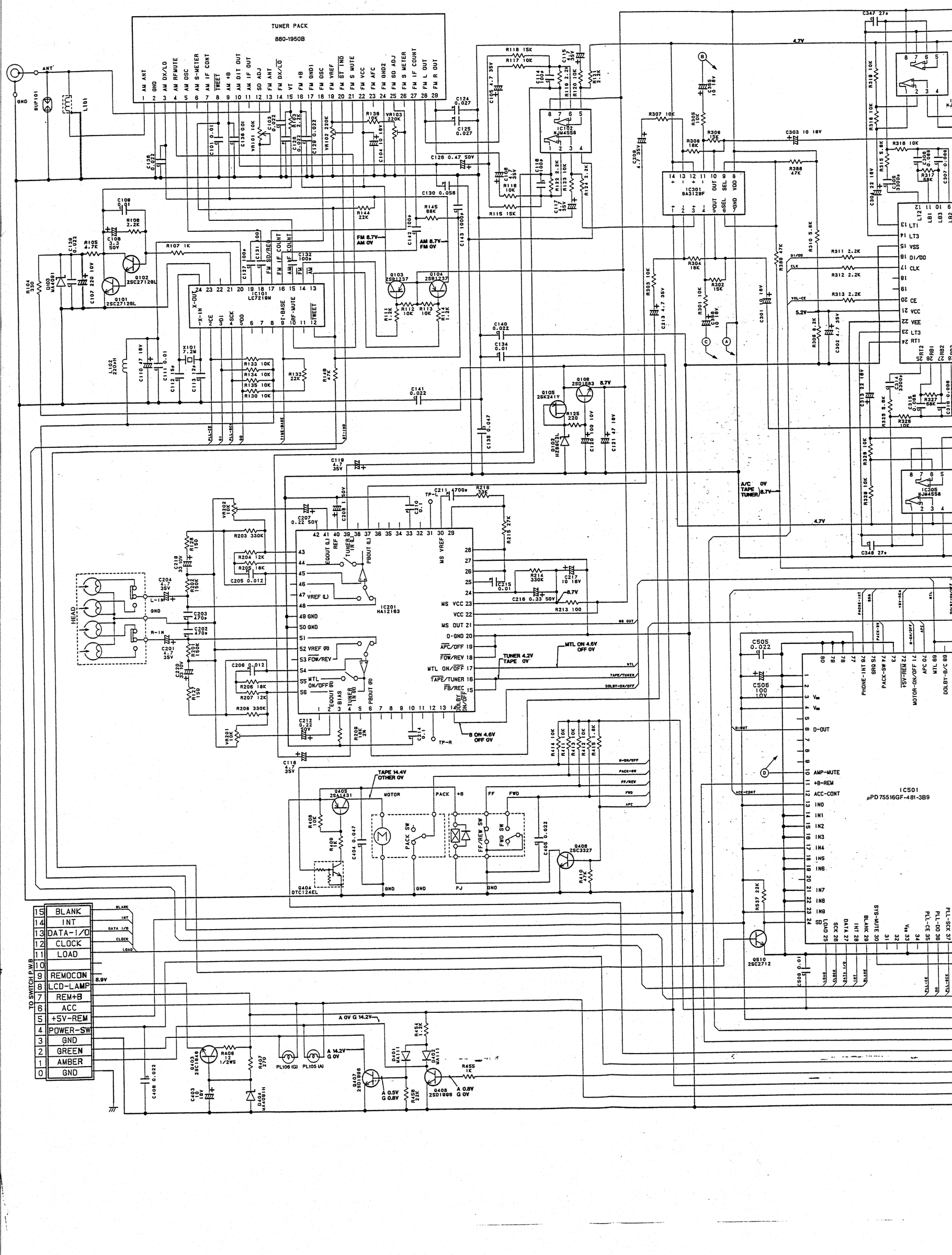
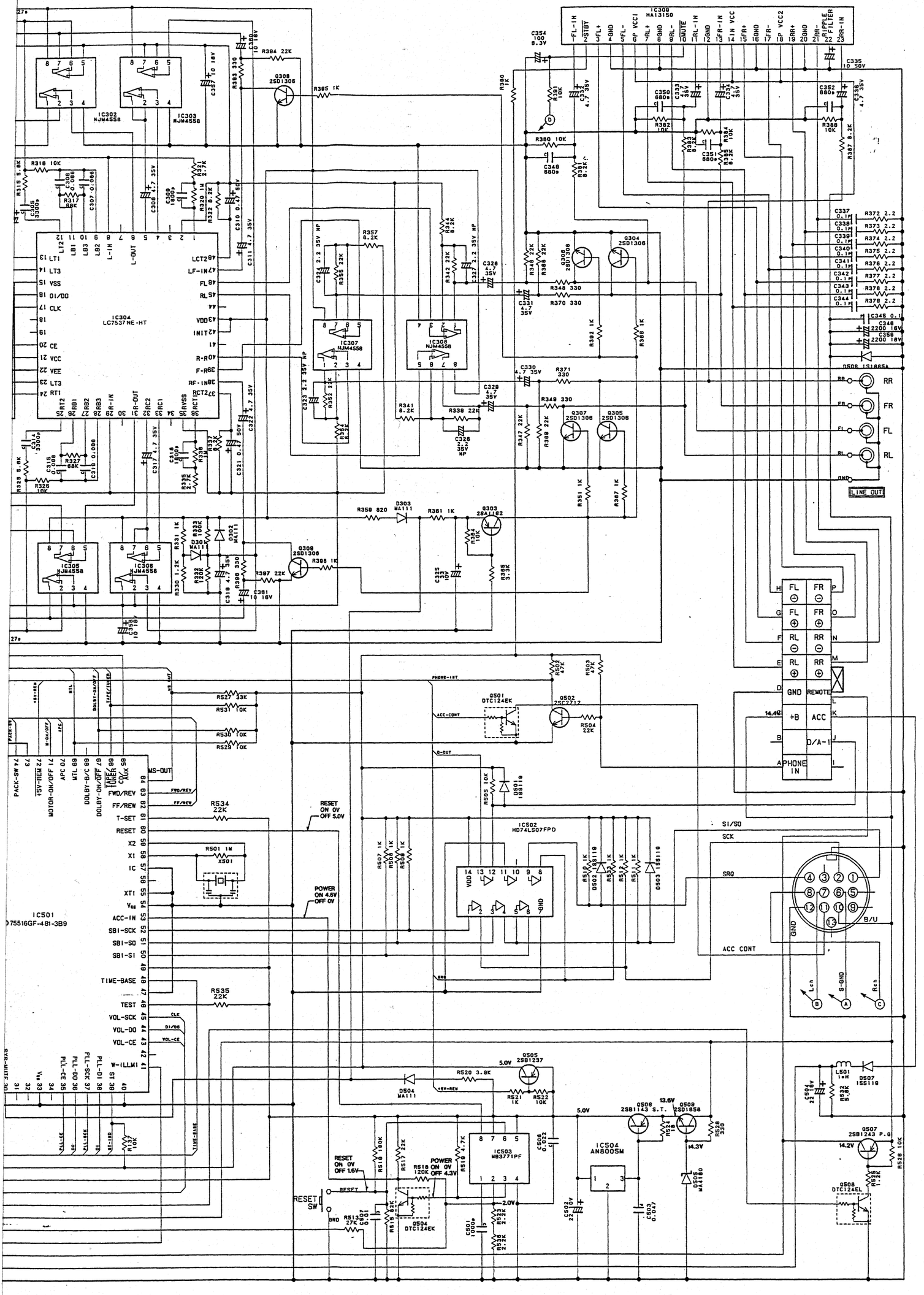
# ■CIRCUIT DIAGRAM: 2/2

◎5750




IC304 LC7537NE-HT
IC501 D75516GF-481-3B9
IC302 NJM4558
IC303 NJM4558
IC305 NJM4558
IC306 NJM4558
IC307 NJM4558
IC308 NJM4558
IC309 HA13150
IC502 HD74LS07FPD
IC503 MB3771PF
IC504 AN8005M
Q308 2SD1306
Q309 2SD1306
Q304 2SD1306
Q307 2SD1306
Q305 2SD1306
Q303 2SA1162
Q501 DTC124EK
Q502 2SC2712
Q504 DTC124EK
Q505 2SB1237
Q506 2SB1143 S.T.
Q508 2SD1858
Q507 2SB1243 P.Q
Q508 DTC124EL
D303 MA111
D304 MA111
D504 MA111
D505 MA4180
D506 1S1885A
D501 1SS119
D502 1SS119
D503 1SS119
D507 1SS119
LINE OUT
RR
FR
FL
RL
GND
FL ⊕
FR ⊖
FL ⊕
FR ⊕
RL ⊖
RR ⊖
RL ⊕
RR ⊕
GND
REMOTE
+B
ACC
D/A-1
APHONE IN
14.4V
SI/SO
SCK
SRQ
ACC CONT
B/U
L-ch
S-GND
R-ch
RESET ON 0V OFF 5.0V
POWER ON 4.6V OFF 0V
RESET ON 0V OFF 1.6V
POWER ON 0V OFF 4.3V
RESET SW
PHONE-1ST
ACC-CONT
D-OUT
MS-OUT
FWD/REV
FF/REW
T-SET
RESET
X2
X1
IC
XT1
VEE
ACC-IN
SBI-SCK
SBI-SO
SBI-SI
TIME-BASE
TEST
VOL-SCK
VOL-DO
VOL-CE
W-ILLMI
PLL-CE
PLL-SCK
PLL-DO
PLL-DI
5.0V
13.6V
14.3V
2.0V

# ■CIRCUIT DIAGRAM: 2/2

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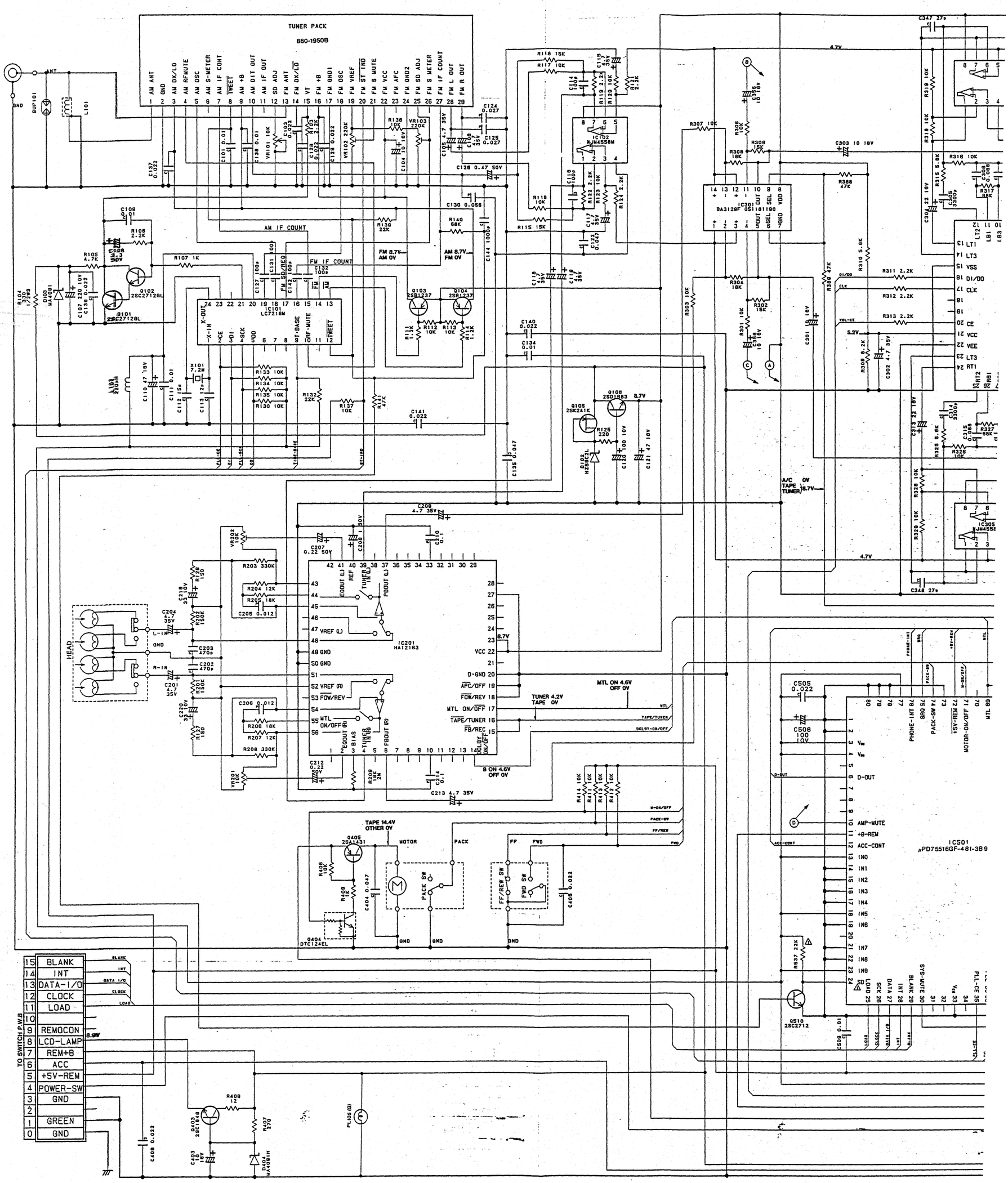

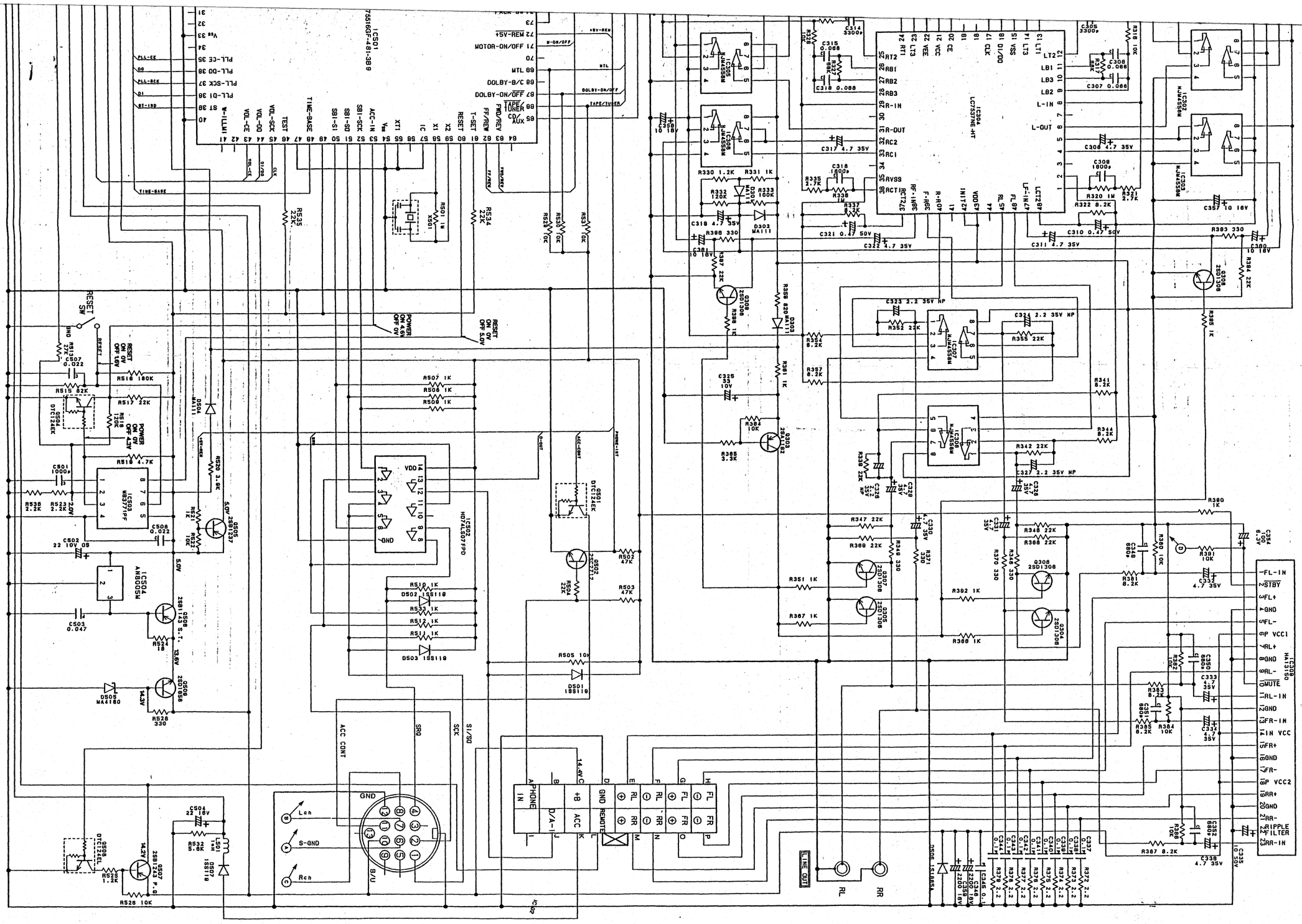
IC501 7551GF481-3B9
RESET SW
POWER ON 4.6V OFF 0V
RESET ON 0V OFF 5.0V
RESET ON 0V OFF 1.6V
POWER ON 4.3V OFF 0V
IC503 HB3771PF
IC502 HD74LS07FPD
IC504 NJM4558M
IC305 NJM4558M
IC302 NJM4558M
IC303 NJM4558M
IC304 LC75507NE-4HT
IC306 HA13150
Q501 DTC124EK
Q502 2SD1278
Q503 2SB1203 S-T
Q504 2SB1237
Q505 2SB1203 S-T
Q506 DTC124EL
Q507 2SB1237 P-R
Q508 2SD1858
Q301 2SD1308
Q302 2SD1308
Q303 2SD1308
Q304 2SD1308
Q305 2SD1308
Q306 2SD1308
Q307 2SD1308
Q308 2SD1308
D501 1SS119
D502 1SS119
D503 1SS119
D504 MA111
D505 MA4160
D506 1S1885A
D507 1SS119
D302 MA111
D303 MA111
RESET
ON 0V OFF 1.6V
POWER ON 4.3V OFF 0V
POWER ON 4.6V OFF 0V
RESET ON 0V OFF 5.0V
TIME-BASE
ACC-IN
SBI-SCK
SBI-SO
SBI-SI
VOL-SCK
VOL-DO
VOL-CE
TEST
T-SET
RESET
FWD/REV
TAPE/TUNER
DOLBY-ON/OFF
DOLBY-B/C
MOTOR-ON/OFF
REM-+5V
MTL
PLL-CE
PLL-DO
PLL-SCK
PLL-DI
ST
ACC CONT
SRQ
SCK
SI/SO
B/U
GND
Lch
S-GND
Rch
PHONE IN
D/A-I
+B
ACC
GND
REMOTE
FL
FR
RL
RR
LINE OUT
RL
RR
FL-IN
STBY
FL+
GND
FL-
VCC1
RL+
GND
RL-
MUTE
RL-IN
GND
FR-IN
VCC
FR+
GND
FR-
VCC2
RR+
GND
RR-
RIPPLE FILTER
RR-IN